









HERBARIUM  
PEDEMONTANUM

CURANTE

ALOYSIO COLLA

VOL. VI.

TAURINI  
EX REGIO TYPOGRAPHEO  
1836



7-1  
Ann. ex A. 5.



# HERBARIUM

## PEDEMONTANUM

J U X T A

METHODUM NATURALEM DISPOSITUM

· ADDITIS NONNULLIS STIRPIBUS EXOTICIS

AD UNIVERSOS EJUSDEM METHODI ORDINES EXHIBENDOS

C U R A N T E

**ALOYSIO COLLA**

AMPLISS. JURISCONSULT. COLLEG. R. TAURIN. UNIVERSIT. COOPTATO -  
R. SCIENTIAR. ACAD. ET R. SOCIET. AGRICULT. TAURINENS. SOCIO - SOCIET.  
NAT. SCRUT. HELVET. - SOCIET. LINN. PARISIENS. - SOCIET. IMP. R.  
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ART. LUGDUN. - I. ET R. ACADEM. OECONOM. AGRAR. FLORENT. - SOCIET.  
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ETC. ETC.

VOL. VI.

SISTENS GRAMINEAS

AD FUNGOS

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EX TYPIS REGIIS

1836

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v. 6

HERBARIUM

PRODEMONTANUM

1884

PRODEMONTANUM

ADDITIONAL SPECIMENS

GRASS

ALOUSIO COLIA

ALOUSIO COLIA, a small, upright, branched, perennial herb, with a woody base, and a dense, branched, terminal panicle of small, white, tubular flowers. The leaves are narrow, linear, and pointed, with a distinct midrib. The fruit is a small, round, capsule.

VOL. VI

SISTENS GRAMINEAS

ACQUATE TABULONUM

EX TYPIS

1884



ORDO CLXXXIX.

GRAMINEÆ

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(Juss: gen: p. 28. = J. S. Hill. fam: I. p. 70.  
t. 13. = R. Br: prodr: ed. 1. p. 168. ed. 2. p. 24.  
= Bartl: ord: nat: p. 26. = Inter *Loxines* class: II.,  
*Gymnanthas* subcl: I., *Glumaceas* coh: I., *Gra-*  
*mineas* fam: 14. Mart: consp: regn: veget: p. 4.)

*Char: essentialis.*

» *Flores* hermaphroditi vel diclini glumacei. *Glu-*  
» *mula* (*calyx* L., *gluma* Juss.; *gluma exterior* DC.)  
» 1-2 vel in rachide communi distiche multiflora 2-  
» valvis raro 1-valvis vel nulla. In singulo flosculo  
» *perigonium* (*corolla* L., *calyx* Juss.; *perianthium*  
» R. Br.) glumulæ sub-simile 2-valve vel rarius 1-  
» valve, valvula exteriori plerumque carinata, 1-3-5-7-  
» nervia sæpius aristata, interiori tenuiori plerumque  
» 2-nervi mutica vel rarius 2-aristata quandoque ob-  
» soleta vel nulla. *Squamulæ* hypogynæ (*nectarium*  
» quorundam) 1-2 inter valvulam anteriorem et sta-  
» mina vel oppositæ aut nullæ. *Stam:* hypogyna sæ-  
» pius 3. rarius pauciora vel plura, antheris 2-locu-  
» laribus utrinque discretis. *Ovar:* 1. liberum 1-0-  
» vulatum. *Styl:* 2. distincti vel inferne connati raro  
» 1-3., stigmatibus plumosis vel hispidulis. *Fructus*  
» 1-spermus semen nudum simulans lævis vel longi-  
» tudinaliter sulcatus (*caryopsis* Rich.; *pericarpium*

AUG 7 - 1923  
General Bot. Garden

- » *semini adnatum* R. BR: ). *Album*: farinaceum extus
- » basi foveola insculptum in qua embryo applicitus.
- » *Cityledon* scutelliformis carnosa persistens. *Plumula*
- » nuda vagina propria inclusa. »

*Obs:* Ordo præ ceteris fructificatione et habitu naturalissimus ac ditissimus, herbæ (raro suffrutices) radice fibrosa subinde repente annua vel perenni, culmis cylindraceis fistulosis nodoso-articulatis sæpius simplicibus nunc alterne ramosis, foliis alternis ad singulum articulum solitariis nervoso-striatis, lamina sæpissime plana petiolo dilatato vaginam hinc longitudinaliter fissam vel clausam ad faucem membranula adaucta (*ligula*) a lamina separatam formante. Flores parvi spiculis (*locustæ*) varîe congestis, sc: vel in paniculam vel in spicam vel in fasciculum. Constat autem (ex BARTL:) generibus 212. varîe ab Auctoribus divisîs; cl: R. BR: tres præcipuas in fructificatione observavit modificationes, glumulam scilicet 1-2-multifloram, glumulam 2-floram, glumulam 3-floram; alii alias proposuerunt divisiones; demum BARTL: in 10. tribus totum ordinem distribuit inspectis pluribus inflorescentiæ modis et numero, structura, ac consistentia quorundam fructificationis organorum, amandatis ad calcem nonnullis generibus quoad locum dubiis: hanc sequor divisionem utpote iudicio meo faciliorem ad genera cognoscenda etsi non valde naturalem illam existimem. Cons: insuper PALISOT DE BEAUVOIS *Essai d'une nouvelle Agrostographie* Paris 1812.; RASPAIL in *Ann: sc: nat:* Avril 1825. p. 423. et seqq.; idem *Mémoire sur la formation de l'embryon* Mars p. 271. et Juillet p. 257.; idem *Déve-*



loppement de la fécule dans les Céréacées, Octobre p. 224. et Décembre p. 384.; TRINIUS *Fundamenta Agrostographiæ* Vienna 1820.; nec non ejusdem *Illustrat: Gramin: in bull: univ: 1831. Janv: p. 54.;* MARTIUS et NEES *Agrostologia brasiliensis in Arch: bot: I. p. 521.;* KUNTH *Agrostographia synoptica ibid: II. p. 435. c. tabula generum etc. etc.*

### Trib: I.

STIPACEÆ (Spiculæ paniculatæ 1-floræ vel 2-floræ sursum imperfectæ; glumæ membranaceæ; valvula inferior coriacea convoluta aristata; styl: 2. Gen: 7. ex BARTL: p. 28.).

I. ARISTIDA Lin: gen: ed: Schreb: n. 125. excl: 1. stirpe = Spr: syst: n. 276. = Lam: ill: t. 41. = *Aristidæ* et *Chætariæ* sp: P. de Beauv:

» *Glumula* 1-flora 2-valvis, valvulis cuspidatis.  
 » *Perigon:* pedicellatum 2-valve, valvulæ exterioris  
 » arista ad basim usque 3-partita setis sub-æqualibus  
 » (in *Chætaria*) vel inæqualiter 3-fida setis latera-  
 » libus minori media firmiori longiore (in *Aristida*),  
 » valvula interiori minuta mutica squamulas hypogy-  
 » nas vix superante. *Stigm:* plumosa. *Caryops:* cylin-  
 » dracea. »

*Obs:* Pulchellum genus constans 40. circiter stirpi-  
 bus exoticis præsertim ex *Afr:*, *Amer:*, et *N. Holl:*,  
 excepta *A. gigantea* L. quæ crescit etiam in *Hispan:*  
 Occurrit quandoque in frigidariis nostris *A. adscen-*  
*sionis* = L. sp: 121. *Chætaria* P. de Beauv: (Ins:

*Ascens:*, *Arab:*, *Ind:* occid:, *Ægypt:*). Peren: Elata, folia filiformia, culmus et panicula valde ramosi ramis strictis, aristæ sub-æquales elongatæ sub-patentes. Habeo etiam ex *Ægypt:* a cl: SAVI; an eadem ac *A. paniculata* FORSK: a SPR: omissa? Videtur.

II. STIPA Lin: gen: ed: Schreb: n. 121. excl: 1. stirp: = Spr: syst: n. 264. = Lam: ill: t. 41. = *Stipæ* et *Achnateri* spec: P. de Beauv: = *Agrostidis*, *Avenæ*, *Andropogonis* et *Jaravæ* spec: nonnullæ quorund:

» *Perigonii* valvula exterior involuta apice articulata  
 » cum arista simplici barbata aut nuda subinde longissima. *Caryops:* ovata sulcata. Cetera fere ut in, » *Aristida.* »

*Obs:* Genus constans stirpibus 40. circiter per orbem sparsis inter quas 7-8. europææ. Herbæ annuæ vel perennes cæspitosæ, floribus paniculatis vel racemosis, arista barbata aut nuda, ex quo generis divisio in duas sectiones. Observat cl: BERTOL: in hoc genere caryopsidem decidere cum perigonio obducente et pedicello suo acutissimo ex se in terram figi.

### 1. Arista barbata.

\* 1. *St: pennata* = L. sp: 115. = Spr: syst: I. 254. Bertol: fl: ital: I. p. 685. = Host: gram: austr: IV. p. 19. t. 33. Ic. taur: vol. 1. t. 80. Vern: *Piumet*, *Piumaj*, *Darbanna* (*Eur:* med: *Pedem:* e rupium fissuris locis apricis et montanis solet prodire ALL: n. 2172. In apricis *delle Blaccie* atque in saxosis *M.*



*Musiné* RE fl: segus: p. 13. et fl: tor: I. p. 80.). Peren: Elatiuscula, folia linearia angustissima rigidula, culmi teretes striati glabri, panicula stricta pauciflora, spiculæ 1-floræ graciles viridi-flavescentes, glumulæ valvæ sub-æquales setaceo-acuminatæ persistentes, arista longissima inferne nuda supra geniculum eleganter pilis albis pennata.

\* 2. *St: tortilis* = Desf: fl: atl: I. p. 99. t. 31. f. 1. = Spr: syst: I. 255. Bertol: fl: ital: I. p. 688. = *St: paleacea* Sibth: fr: græc: I. p. 68. t. 86. (*Eur: austr.*, *Afr: bor.*, *Villafranca Nicæens*: DC. fl: fr: suppl: p. 257. *Liguria occid.*, *Ceriale*, *Pietra et Capo S. Spirito* BERTOL: I. c. p. 689. *Sardin*: in arenosis *Campidano di Cagliari* MORIS st: sard: I. p. 52.). Ann: Elata, folia inferiora præsertim latiora quam in priori, inflorescentia in racemum spiciformem densiflorum, glumulæ valvæ angustissimæ lanceolato-lineares, arista longiuscula inferne cochleato-contorta sursum hirta ad apicem attenuata scabrida.

## 2. Arista nuda.

\* 3. *St: capillata* = L. sp: 116. = Spr: syst: I. 255. Bertol: fl: ital: I. 686. = Host: gram: austr: III. p. 4. t. 5. Ic: taur: vol. 21. t. 93. *St: Lagasca* Guss: sec: Bertol: (*Eur: passim. Pedem: circa Segus.*, in valle *Augustæ Prætoricæ* et in monte *S. Michaëlis della Chiusa* locis apricis ALL: n. 2173. RE fl: segus: p. 13. *Sardin*: in aridis saxosis MORIS st: sard: I. p. 52.). Peren: Elata, culmi rigidiores et crassiores quam in præcedentibus, folia planiuscula superne pu-

bescentia, panicula laxe ramosa, glumulæ valvæ apice seta terminatæ, arista longa capillaris vix sub lente hirsutiuscula superne arefactione tortuosa.

\* 4. *St. juncea* = L. sp: 116. = Spr: syst: I. 255. Bertol: fl: ital: I. p. 687. = Sibth: fl: græc: I. p. 67. t. 85. (*Eur: austr: Afr: bor: In agro Nicæens: prope Villafranca locis saxosis calidioribus ALL: auct: p. 39. n. 2173.\* c. descr: Liguria occidua ex Castell' Erno BERTOL: l. c. p. 688.*). Affinis priori sed differt statura *minori*, foliis *convolato-junceis glabriusculis*, panicula *striata* et fere *spiciformi*, arista dimidio *brevisiori* ac *rigidiori* infra geniculum sursum *hirta* supra *scabrida* etiam adulta *recta*.

\* 5. *St. Aristella* = L. syst: III. p. 229. = Spr: syst: I. 255. = Sibth: fl: græc: I. p. 69. t. 87. All: auct: p. 39. n. 2173. \*\* t. 2. f. 4. *Agrostis Oromoides* L. mant: I. p. 30. *Aristella Oromoides* Bertol: fl: ital: I. p. 690. (*Eur: austr: Frequenter occurrit locis sterilibus et calidioribus Comit: Nicæens:, abunde circa Villafranca ALL: l. c. c. descr: Sardin: in apricis saxosis MORIS st: sard: I. p. 52.*). Præter differentias específicas præsertim foliis convolato-filiformibus, panicula valde stricta, spiculis remotiusculis, glumulæ valvis cuspidatis, arista simplicissima tota recta brevi, aliquantulum recedit a genere valvis glumulæ 3-nerviis nec exteriore 5-nervi, perigonio sessili nec pedicellato, ac demum facie potius *Bromi* quam *Stipæ*, ex quibus el: BERTOL: videtur suum distinctum genus constituisse.

\* 6. *St. Calamagrostis* = Wahlemb: de veg: et clim: in Helv: p. 23. = Spr: syst: I. 255. = *Agrostis Calamagrostis* L. sp: 92. All: auct: p. 39. *Arundo*



*speciosa* Schrad: fl: germ: I. p. 219. t. 4. f. 8. et Bertol: fl: ital: I. p. 736. *Calamagrostis speciosa* Host: gram: austr: IV. p. 26. t. 45. Sub *Achnatero* P. de Beauv: Sub *Lasiagrostide* Link: ( *Eur: passim. Pedem: locis saxosis apricis et montanis* ALL: auct: p. 39. n. 2155. \* RE fl. segus: p. 11. Ad torrentes collium frequens, in aquæductibus vallis *Ticini* rara BIROLI fl: acon: I. p. 24. omnes sub *Agrostide*. Secus rivulum *di Sassi* RE fl: tor: I. p. 360. sub *Arundine speciosa*. *Liguria* occidua ex jugo *di S. Spirito* BERTOL: l. c. p. 737. E collibus *Albensib: retulit BERTERUS*). Peren: Valde elata, folia anguste linearia sub-convoluta margine et superne scabrida, panicula composita diffusa ampla elegans, spiculæ 1-floræ elongatæ viridi alboque lutescentes demum spadiceæ, glumulæ valvæ subæquales lanceolatæ compressæ 3-nerviæ, arista nuda demum refracta cum perigonii valva exteriori dorso argenteo-pilosa *continuata*, ex quo observat BERTOL: ad *Stipam* referri non posse. Habitu ludit inter *Stipam*, *Agrostidem* et *Arundinem*.

## Trib: II.

AGROSTIDÆ (Spiculæ ut in Trib: I. glumæ et valvulæ consistentia æquali sub-membranaceæ.  
Gen: 16. ex BARTL: p. 28.).

III. LAGURUS Lin: gen: ed: Schreb: n. 132. = Spr: syst: n. 286. = Lam: ill: t. 41.

» *Glumula* 1-flora 2-valvis, valvulis æqualibus li-  
» nearibus extus sericeo-plumosis. *Perigon: glumula*

» duplo brevius 2-valve, valvula exteriori majore  
 » apice 2-setosa dorso aristata, interiori breviori.  
 » *Squamulæ* hypogynæ 2. ovatæ integræ. *Stigm:* plu-  
 » mosa. *Caryops:* libera ovata lævis. »

*Obs:* Genus habitu fere proprio, constans unica stirpe sequenti.

\* 1. *L. ovatus* = L. sp: 119. = Spr: syst: I. 273. Bertol: fl: ital: I. p. 728. = Lam: ill: t. 41. Ic: taur: vol. 13. t. 22. et vol. 22. t. 7. f. 2. (*Eur:* austr: In agro *Nicæensi* frequens ALL: n. 2174. In *Sardin:* pascuis vulgarissimus MORIS st: sard: I. p. 51.). Ann: Plerumque cæspitosus, folia late linearia plana subundulata culmique mollissime pubescentes, panicula capitata densissima ex globoso ovoidea sericeo-alba demum purpurascens sub-nutans, flores inferiores passim sessiles. *L. cylindricus* ALL: pertinet ad *Saccharum*.

IV. POLYPOGON Desf: pl: atl: I. p. 66. = Spr: syst: n. 251. = P. [de Beauv: agrost: p. 17. t. 6. f. 8. = *Alopecuri*, *Phlei*, *Agrostidis*, *Santieæ* et *Milii* spec: nonnullæ quorund:

» *Glumula* 1-flora 2-valvis, valvulis sub-æqualibus  
 » obtusis sub-emarginatis infra apicem aristatis. *Perigon:* glumula minus 2-valve, valvula infer: dorso  
 » sub-aristata, super: minore 2-fido-dentata. *Squamula* o. *Stigm:* villosa. *Caryops:* libera lævis. »

*Obs:* Genus sensu meo non satis determinatum ceu liquet ex synonymia supra citata, constans ex Spr: 16. stirpibus inter quas 4. europææ ceteræ ex *Amer:* vel *N. Holl:* Inflorescentia in paniculam coarctatam spiciformem ab aristis setosam, spiculæ minutissimæ.



\* 1. *P. monspeliensis* = Desf: l. c. = Spr: syst: I. 242. Bertol: fl: ital: I. p. 379. sub *Alopecuro monspeliensi* et *sericeo* = L. sp: 89. 90. et All: n. 2148. 2149. Ic: taur: vol. 22. t. 77. *Agrostis panicea* W. sp: I. 363. Host: gram: austr: III. p. 32. t. 46. *Phleum crinitum* Schreb: *Santia plumosa* Sav: (Eur: austr:, Helvet: Ad limites agrorum in Comit: Nicæens: et prov: Aqueus: All: n. 2148. sub *Alopecuro monspeliensi*. In pascuis declivibus agri *Pedemontani* frequens All: n. 2149. sub *A. paniceo*. In sabulosis *Campolati* versus *la Garbana* raro occurrit BIROLI fl: acon: I. p. 23. sub *Agrostide panicea*. *Sarzanæ* ad fossas viæ *Romanæ* et in paludosis litoris *Lunensis alla Marinella*; *Genue* ad aquæductum *del Zerbino* BERTOL: l. c. p. 380. *Sardin:* in maritimis ad rivulos MORIS st: sard: I. p. 52. ). Ann: Frequentius elatus, folia linearia latiuscula, panicula oblongata densissima viridi-flavescent, spiculæ minutissimæ, glumulæ aristæ setiformes valvulis 3-4-longiores, perigonii valvula exterior vix infra apicem aristulata. Variat statura, magnitudine paniculæ et longitudine aristarum glumulæ.

\* 2. *P. maritimus* = W. nov: act: cur: vol: III. p. 443. = Spr: syst: I. 242. excl: syn: L. Bertol: fl: ital: I. p. 381. = Guss: pl: rar: p. 28. t. 5. f. 2. (Eur: austr: Copiosissimus prope *Sarzanam* in toto litore *Lunari alla Marinella* et *Liguria* occidua a *Pegli* BERTOL: l. c. Ex agro *Nicæens:* habui a cl: RE. *Sardin:* in arenosis maritimis MORIS st: sard: I. p. 52. ). Vix a priori diversus statura generatim minore et graciliore, panicula fere cylindræa, glumulæ valvis 2-

fidis, perigonio mutico. *Alopecurus paniceus* L. huc a cl: SPR: relatus videtur pertinere ad *P. monspeliensem*. Inter duas allatas species ludere videtur *P. litoralis* SM: quem cl: MORIS l. c. enumerat inter plantas sardoas. Stirpem non possideo ac de ea silet cl: BERTOL:

V. GASTRIDIIUM P. de Beauv: Agrost: p. 21. t. 6. f. 6.  
= Spr: syst: n. 257. = *Milii* et *Agrostidis* sp: L.  
= *Milii* sp: Bertol:

» *Glumula* 1-flora 2-valvis, valvulis basi ventricosis sub-coriaceo-induratis acuminatis muticis. *Perigon*: in ventre glumulæ eaque multoties brevius  
» 2-valve membranaceum valvula inferiore angustiore  
» 3-4-dentata dorso sub-setigera, superiore 2-fido-dentata. *Squamulæ* 2. *Stigm*: penicilliformia. *Caryops*:  
» indusiata. »

*Obs*: Genus *Milio* et *Agrostidi* valde affine, a primo differens præsertim glumula *ovata concava* nec tam *ventricosa* perigonio *nitido*, ab altera perigonio *persistente* nec *deciduo* proindeque caryopside *indusiata* non *libera*, constans 2. tantum stirpibus europæis vix inter se distinctis.

\* 1. *G. australe* = P. de Beauv: l. c. = Spr: syst: I. 250. *Agrostis australis* L. mant: I. p. 30. *Milium lendigerum* L. sp: 91. Bertol: fl: ital: I. p. 390. = Schreb: gram: II. p. 14. t. 23. Sibth: fl: græc: I. p. 49. t. 65. *Gastridium lendigerum* Gaud: fl: helv: I. p. 176. (*Eur*: austr: In Comit: *Nicæens*: ALL: n: 2152. *Genuæ* in collibus *al Lagazzo* et *Sarzanæ* in monte *Caprione* BERTOL: l. c. sub *Milio lendigero*. In aridis *Sardin*: mediæ MORIS st: sard: I. p. 51. ). Ann: Sub-



cæspitosum gracile, folia angusta linearia breviuscula margine scabra, panicula cylindræa spiciformis laxiuscula, glumula nitida, seta perigonii elongata geniculata. *G. muticum* SPR: *Calabriæ* et *Siciliæ* incola vix differt glumula scabra seta perigonii *obsoleta*.

VI. AGROSTIS Lin: gen: ed: Schreb: n. 111. excl: nonnullis stirpibus = Spr: syst: n. 266. = Lam: ill: t. 41. = *Agrostidis*, *Vilfæ*, *Achnanteri*, *Sporobuli*, *Aperæ*, *Cinnæ*, *Calamagrostidis*, *Echinopogonis*, *Gastridii*, *Hymenachnæ*, *Pentapogonis*, *Schenodori*, *Zoysiæ* aliorumque generum spec: quædam Auctorum nonnullor:

» *Glumula* 1-flora 2-valvis mutica persistens. *Perigon*: glumula majus vel minus 2-valvis, valvulis  
 » inæqualibus, majore mutica vel 1-aristata, subinde  
 » valvula altera sub-nulla. *Squamulæ* 2. (an semper?).  
 » *Stam*: 1-3. *Stigm*: villosa. *Caryops*: libera vel (raro)  
 » perigonio adhærens ».

*Obs*: Genus determinatione difficillimum sed, monente D. LINNÆO, quum reliqua genera satis bonos characteres habeant hujus generis gramen esse colligitur in quo illi locum non habent. At quomodo nunc in tanta *Agrostographiarum* affluentia LINNÆI monita sequi possumus? Genus *artificiale* pronuntiat cl: R. BR.; e contra plantas omnino affines illud conjungere tradit cl: BERTOL: addens tamen (et quidem merito) *artificio insigni e minimis petito in genera non naturalia a recentiorum quibusdam nulla necessitate discernptum fuisse*. Species ex SPR: 90. et ultra per orbem sparsæ, inflorescentia in paniculam sæpius patentissi-

mam præsertim anthesis tempore, spiculæ minutæ. Perigonium muticum vel varie aristatum, nec non valvarum proportio consideratur præsertim in generis divisionibus; paniculæ structura, valvarum aristarumque forma optimos præ ceteris præbent specierum characteres.

1. *Perigonio evidenter aristato.*

\* 1. *A. Spica venti* = L. sp. 91. = Spr: syst: I. 263. Bertol: fl: ital: I. p. 393. = Host: gram: austr: III. p. 32. t. 47. Vern: generatim *Lionza* uti ceteræ species indigenæ, speciatim *Bianchet* (*Eur*: fere tota. *Pedem*: vulgatissima in agris ALL: n. 2155. RE fl: segus: p. 11. et fl: tor: I. p. 60. BIROL: fl: acon: I. p. 23. *Sardin*: ad sepes MORIS st: sard: I. p. 49.). Ann: Erecta valde flexilis, folia linearia scabra, panicula diffusa ramis inferioribus sub-simplicibus, valvulæ omnes sub-æquales, arista sub-dorsalis flexuosa longissima, caryopsis libera.

\* 2. *A. interrupta* = L. sp. 92. = Spr: syst: I. 263. Bertol: fl: ital: I. p. 394. = Host: gram: austr: III. p. 33. t. 48. (*Eur*: austr: *Pedem*: ad *Padi* ripam ante *Valentinum* ac locis arenosis prope *Padum* versus *S. Mauro* BALB: addit: p. 85. RE fl: tor: I. p. 60. In pascuis *Ticini* vulgaris BIROL: fl: acon: I. p. 23. Secus *Tanarum* ad *Albam* legit BERTERUS monente BERTOL: l. c. p. 395.). Differt a priori, cui valde affinis, statura undique minori, panicula non tam diffusa potius stricta elongata ramis omnibus compositis remotiusculis unde illa interrupta adparet.



3. *A. pallida* = DC. fl: fr: suppl: p. 251. (*Ital: merid: , Gallo-prov: Sardin: in pascuis et ad sepes Morgongiosi MORIS st: sard: II. p. 11.* ). Ludit inter duas præcedentes , sed differt præsertim perigonio 1-valvi, glumula dimidio breviori, arista tenuiori et breviori ; panicula accedit magis ad *A. Spica venti*.

\* 4. *A. canina* = L. sp: 92. = Spr: syst: I. 259. Bertol: fl: ital: I. p. 396. = Host: gram: austr: IV. p. 31. t. 53. *Trichodium caninum* Schrad: Vern: speciatim *Plon* (*Eur: passim. Pedem: in pascuis humidis frequens ALL: n. 2159. et 2158. sub A. rubra. Locis humidis secus Duriam RE fl: segus: p. 11. Vulgaris in pratis humidis macilentisque prope la Veneria et Druent RE fl: tor: I. p. 61. sub A. rubra et sub Trichodio canino. In pratis vallis Arbogna et della Canetta vulgaris BIROLI fl: acon: I. p. 24. sub A. rubra et canina.* ). Peren: Stolonifera , folia radicalia capillacea fasciculata brevia culmea linearia plana longiora, panicula patula violacea ramis trichotomis rarifloris , glumula ovata acuta , perigonium 1-valve glumula paullo brevius , arista articulata valvula sesquialongior, caryopsis libera. Variat longitudine aristæ quandoque obsoletæ vel etiam nullæ , statura , magnitudine spicularum etc. Vera *A. rubra* L. *Laponiæ* incola excludenda e Fl: pedemontana ; planta a cll: ALL: et RE citata sub hoc nomine est *caninæ* var: culmo erecto , dum in typo sæpius *prostratus* occurrit.

\* 5. *A. alpina* = W. sp: I. 368. non All: = Spr: syst: I. 259. Bertol: fl: ital: I. p. 398. = Host: gram: austr: III. p. 34. t. 49. *A. rupestris* All: n. 2161. non W. *A. setacea* Vill: (*Alpib: Eur: Pedem: in rupibus*

montanis apricis ALL: n. 2161. BIROLI fl: acon: I. p. 25. In *M. Cenisio* RE fl: segus: p. 11. omnes sub *A. rupestri*). Ann: Humilis cæspitosa, folia convolutosetacea, panicula laxiuscula glabra, glumula acuminata, perigonium sæpius 1-valve apice crenulatum, arista geniculata valvula duplo longior.

\* 6. *A. rupestris* = W. sp: I. 368. excl: syn: All: = Spr: syst: I. 259. Bertol: fl: ital: I. p. 399. = Host: gram: austr: III. p. 34. t. 50. *A. alpina* et *Avena aurata* All: n. 2160. et 2254. *A. festucoides* Vill: (Alpib: *Eur. Pedem:* in pascuis summarum et editiorum Alpium ALL: ll. cc. BIROL: fl: acon: I. p. 24. sub *A. alpina*. In summis pascuis *M. Cenisii* RE fl: segus: p. 14. pro *Avena aurata*. In alpinis *Liguriae* occidentis *alla Scaggia* retro *Pegli* loco dicto *la Polla* BERTOL: l. c. p. 400.). Differt a priori, cum qua sæpissime ab Auctoribus commutata, statura undique (præcipue paniculae) generatim *maiore*, ramis constanter *scabris*, perigonio 2-valve valvula maiore *denticulato-2-seta*. Ceterum et ipsa variat tum statura cum florum colore sæpius tamen magis perspicuo a *flavescenti* ad *auratum*.

## 2. *Perigonio sæpius mutico.*

\* 7. *A. vulgaris* = Smith: engl: fl: I. p. 91. = Bertol: fl: ital: I. p. 402. = Host: gram: austr: IV. p. 34. t. 59. *A. vulgaris* et *A. alba* Spr: syst: I. 257. n. 1. 2. *A. alba* All: n. 2166. Fl: dan: t. 1623. ex L. *A. stolonifera* All: n. 2162. α ex L. sp: 93. Fl: dan: t. 564. Ic: taur: vol. 22. t. 82. *A. hispida*



Balb: misc: bot: p. 9. ex W. *A. capillaris* All: n. 2165. non Smith: ? Fl: dan: t. 163. *A. pumila* All: n. 2167. ex L. *A. intermedia* Balb: addit: p. 85. et misc: bot: p. 9. *Vilsæ* sp: P. de Beauv: (Vulgatissima per totam *Eur*: et in *Pedem*: ac speciatim pro *A. alba* in sylvis montanis ALL: n. 2166. In sterilibus *di Condove* regione dicta *la Grangietta* RE fl: segus: p. 11. In locis humidis et ad pratorum fossas collium *Taurinens*: RE fl: tor: I. p. 61. In uliginosis collium BIROL: fl: acon: I. p. 25. *Liguria* BERTOL: l. c. p. 405. pro *A. stolonifera*. Ad vias locis sterilibus et sabulosis ALL: n. 2162. Copiose in pratis *di Venans* RE fl: segus: p. 11. In pascuis et pratis BIROL: fl: acon: I. p. 25. pro *A. hispida*. In pascuis haud rara BALB: misc: bot: p. 9. pro *A. capillari*. In pratis humidis montanis ALL: n. 2165. RE fl: segus: p. 11. Valle *Siccida alla Colma* vulgaris BIROL: fl: acon: I. p. 25. pro *A. pumila*. Circa *Lucengo* ALL: n. 2167. In humentibus *della Mandria* et *Caselette* BALBIS ll. cc. sub *A. intermedia*. In collinis *Sardin*: med: MORIS st: sard: I. p. 49. sub *A. vulgari* sine alio synon: ). Consentunt omnes Auctores circa lusus hujusce plantæ reapse polymorphæ, de qua ideo difficillime vera diagnosis statui potest; nec tamen separandæ allatæ stirpes ne affinitates disjungantur; præcipui characteres sunt flores laxè *paniculati*, glumula *acuminata* valvis carinæ *scabris*, perigonii valvæ *inæquales* interior plerumque *dimidio brevior*, arista vera *nulla*; interdum tamen nervus medius valvæ prodit in setulam aristæformem. Ceterum innumeræ fere sunt permutationes, quibus subjacet hujusce stirpis typus; nec puto hispiditatem

vel glabritiem paniculæ, aut ligulæ longitudinem sat constantes esse characteres ut *A. alba* a *vulgari* se-jungatur; sunt isti lusus non magis habendi quam statura, directio, perigonii longitudo, præsentia se-tulæ aliæque notæ sæpissime occurrentes. Cons: tamen GAUD: fl: helv: I. p. 186. - 193. ubi utramque stirpem admittit, enumeratis pro unaquaque præcipuis varr:, circa quas et synon: consulendus quoque BERTOL: l. c.

\* 8. *A. verticillata* = Vill: delph: II. p. 74. = Bertol: fl: ital: I. p. 408. = Trin: spec: gram: fasc. III. c. ie: *A. stolonifera*  $\beta$  L. sp: 93. non All: Spr: syst: I. 257. (*Eur: austr: , Amer: bor: In agro Nicæens: locis humidis et umbrosis maritimis* BALE: misc: bot: p. 9. *Sarzane in fossis al Fondamento. Genuæ prope la Polveriera sub il Lagazzo alibique in Liguria* BERTOL: l. c. *In Sardin: humidis* MORIS st: sard: II. p. 11. sub *A. stolonifera*). Priori valde affinis, sed dif-fert culmis cæspitosis *basi radicanibus* adscendenti-bus, panicula *spiciformi coarctata* ramis alterne *ver-ticillatis densissime* multifloris, glumula *obtusa* valvis extus *undique pubescentibus*, perigonii valvis *æquali-bus* numquam *aristatis* nec *setosis*, quæ omnia ac præsertim paniculæ forma habitum diversum ei tri-buunt.

\*? 9. *A. pungens* = Vhal: symb: I. p. 9. = Spr: syst: I. 257. Bertol: fl: ital: I. p. 409. = Schreb: gram: II. p. 46. t. 27. f. 3. (*Eur: austr: , Afr: bor: Locis aridis mari Nicæensi proximis* legit BELLARD: sec: ALL: n. 2161. *Sardin: in arenis maritimis* MORIS st: sard: I. p. 49.). Peren: Stolonifera reptans, folia disticha rigida mucronata sub-pungentia, panicula



thyrsoidæ densiflora acuta, glumulæ valvæ inæquales oblongo-lanceolatæ glabræ, perigonii valvæ æquales glabræ. Fide cl: ALL: refero hanc stirpem inter plantas indigenas; valde tamen dubito in agro *Nicæensi* adinveniri spontaneam. Cl: DC. fl: fr: n. 1523. monet illam crescere in arenosis maritimis *Narbonensibus* non *Nicæensibus*, addens in suppl: p. 253.: *depuis la frontière d'Italie jusqu'à celle d'Espagne*, quod indicat trans *Varum*. Cl: BERTOL: l. c. ad litora marina *Italiæ* calidioris tantum ejus habitationem limitat, et nulla specim: ex agro *Nicæensi* memorat, quod certe non omisisset sollertissimus vir. Specim: mea ex *Ægypto* a DONATO, et a BALBIS: sine loci indicatione inter se non parum discrepant, *Nicææ* autem frustra illam quæsi. An huc referenda *A. maritima* LAM: quam cl: MORISIUS l. c. pariter crescere tradit in arenosis maritimis *Sardin:*? Hanc enumerat BERTOL: fl: ital: I. p. 403. inter synon: *A. vulgaris*; plantam non vidi, sed ex descr: DC. fl: fr: n. 1524. magis accedit ad *A. pungentem* a qua differt tantum glumulæ valvis carina *hispidulis* et culmo *erecto*.

*Stirpes dubiæ vel novæ.*

10. *A. retroflexa*. = Balb: in sched: sine alia indicatione. Ab *A. vulgari* mihi non videtur diversa nisi præsentia setulæ aristæformis in valva perigonii glumulam excedentis; an var:  $\beta$  BERTOL: fl: ital: I. p. 404. ? = 11. *A. dura* = Bellard: hb: *Nova spec: ex India orient:* Ita in scheda specim: Bellardiani.

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» *A. erecta humilis*, foliis distichis linearibus canaliculatis rigidis acutis, panicula spiciformi aucta ramis alternis rigidiusculis paucifloris, glumulæ valvis æqualibus acutis glabris, perigonio mutico valvula altera obsoleta. » Noë: Planta vix spithamæa rigida, spica striata vix pollicaris; facie *A. pungentis* n. 9., sed statura undique valde *minori*, valva altera perigonii *obsoleta* diversa. = 12. *A. boetica* = H. R. Matrid: Ita in sched: specim. ex hb: Birol. » *A. foliis lineari-lanceolatis planis patentissimis*, culmo filiformi erectiusculo, panicula laxa ramis divaricatis sub-multifloris, glumulæ valvis æqualibus acutis glaberrimis dorso viridibus margine scarioso pellucidis, perigonii valvis glumulam subæquantibus altera longe aristata. » Noë: Valde accedit ad *A. Spica venti* n. 1., sed statura undique minor. = 13. *A. umbellata* = Nob: *A.?* Berter: in sched: » *A. foliis strictis linearibus culmoque striatis scabriusculis*, panicula coarctata glabra, ramis verticillatis, verticillis umbellatis, radiis capillaribus sub-quaternis 1-floris, glumulæ valvis æqualibus muticis, caryops: libera. » Noë: Paniculæ structura unde nomen specificum a ceteris stirpibus mihi notis diversa; habitat *Chili Rancagua*.

VII. CALAMAGROSTIS Adans: fam: des pl: II. p. 31. = Spr: syst: n. 262. = P. de Beauv: agr: p. 15. t. 5. f. 9. = *Calamagrostidis*, *Arundinis*, *Achnacteri*, *Agrostidis* sp: nonnullæ quorund:

» *Glumula* 1-flora 2-valvis, valvulis inæqualibus  
» muticis acutis. *Perigon*: glumula minus 2-valve pilis



» cinctum, valvulis inæqualibus, inferiore denticulata  
 » setigera. *Squamulæ* 2. lanceolatæ minutæ. *Stam*: 3.  
 » *Stigm*: villosa. *Caryops*: libera. »

*Obs*: Genus cum *Arundine* L. sæpe conjunctum, sed ex glumula *uniflora* nec uti in illa *multiflora* præsertim distinctum immo ad aliam pertinens ordinis sectionem. Cl: BERTOL: fl: ital: I. p. 731. plura genera hic junxit in distinctas sectiones, sc: *Donacem* (*Arundo*), *Latiagrostidem*, *Ampelodesmos*, *Phragmitidem*, *Calamagrostidem* et *Deyeuxiam*. Sed ex superiori observatione *Arundinem* separandam censeo, nec non *Deyeuxiam*, speciatim ob *rudimentum flosculi* aristæformis valvulæ inferiori perigonii adpressum. *Calamagrostis* constat ex SPR: stirpibus 20. circiter, quarum media pars circiter europæa, ceteræ exolicæ. In omnibus flores paniculati.

\* 1. *C. epigejos* = Roth: fl: germ: II. part: I. p. 91. = Spr: syst: I. 252. *Arundo epigejos* L. sp: 120. Bertol: fl: ital: I. p. 743. = Host: gram: austr: IV. p. 24. t. 42. *Arundo Calamagrostis* All: n. 2264. non L. (*Eur*: passim. *Pedem*: ad aquas stagnantes lentissime fluentes aut inundantes secus fossas et fluvios frequens ALL: l. c. In sabulosis vallis *Segusianæ* RE fl: segus: p. 14. sub *Arundine epigejos*. Secus *Sturam* alibique RE fl: tor: I. p. 82. In fossis oryzarum frequens BIROLI fl: acon: I. p. 37. sub *A. calamagrostide*. Ex ripis dumosis *Tanari* habuit BERTOL: a BERTERO). Folia lanceolato-lineariora elongata glauca dorso scabra, culmus superne scaber, panicula stricta densiflora elongata ramosissima spiculis numerosissimis paniculato-congestis, glumulæ valvulæ acuminatæ cari-

nato-involutæ parum inæquales, perigonium scariosum lana alba obvallatum valvula exteriori apice 2-fida e dorso brevi setoso-aristata interiore duplo breviori, apice sub-quadrifida glabra. Stirps sæpe confusa cum *Agrostide Calamagrostide* L. (*Calamagrostis lanceolata* DC.), quæ differt præsertim panicula *laxiflora*, valvula perigonii exteriori *denticulata apice non dorso brevius aristata*, arista *incurva* nec recta sæpius *obsoleta*. Hanc habeo ex *Helvetia* non ex *Pedem*: ubi illam frustra quæsi vi quamvis a ALL: et BIROL: utraque enumeretur forsitan errore ductis a synon: Cl: BERTOL: l. c. p. 747. monet illam habuisse tantum ex agro *Mantuano*.

\* 2. *C. litorea* = DC. fl: fr: suppl: p. 255. = Spr: syst: I. 252. = *Arundo litorea* Schrad: fl: germ: I. p. 212. t. 4. f. 2. Bertol: fl: ital: I. p. 745. *A. Pseudo-phragmites* Gaud: fl: helv: I. p. 196. ex Hall: fil: (*Eur: austr: , Helvet: Pedem: secus flumen Stura prope Cuneum* DC. l. c. In arenosis secus *Padum* et prope *Moncalieri*, inter *Taurinum* et confluentem *Sturæ* cum *Pado* RE fl: tor: I. p. 83. Habeo ex BERTERO lectam secus *Tanaro*). Vix differt a priori foliis *angustioribus*, culmo *toto glabro*, panicula *diffusa purpurascens*, arista *terminali*. Cum hac forsitan commutata *A. epigejos* ALL: et BIROL:

\* 3. *C. montana* = Host: gram: austr: IV. p. 27. t. 46. = Spr: syst: I. 252. = *C. acutiflora* DC. fl: fr: suppl: p. 285. *Arundo montana* Bertol: fl: ital: I. p. 750. Gaud: fl: helv: I. p. 200. *A. varia* Schrad: germ: I. p. 216. t. 4. f. 6. (*Eur: collibus. Pedem: in sylvaticis thermarum Valdensium reperit* BERTERUS,



nobisque et cl: BERTOL: communicavit. Cl: DC. l. c. non dubitat eam pariter adinveniri in locis humidis aliarum Alpium. Habeo quoque a PERRET ex *Sabaud:* sed sine loci indicatione). A præcedentibus distinguitur præsertim panicula *stricta* sub-patente tantum in anthesi, ramis *brevibus*, perigonii valva exteriorè pilis *longiore* ex imo dorso aristata. Huc refert cl: BERTOL: *Arundinem Agrostis* ALL: forsan ex synonym: HALL: Dissentit cl: BIROL: in mss: putans ad seq: potius pertinere, cum qua reapse magis quadrare videtur ex specim: meis.

\* 4. *C. sylvatica* = DC. fl: fr: suppl: p. 253. = Spr: syst: l. 253. = *C. pyramidalis* Host: gram: austr: IV. p. 28. t. 49. *Arundo sylvatica* Schrad: fl: germ: l. p. 218. t. 4. f. 7. Bertol: fl: ital: l. p. 748. *A. Agrostis* All: n. 2265. *Agrostis arundinacea* L. sp: 91. (*Eur: nemoribus. Pedem: in montibus S. Michaëlis della Chiusa et di Viù et Ussey* ALL: l. c. In saxosis Alpibus *M. Cenisii* RE fl: segus: p. 11. sub *Agrostide arundinacea*. Secus aquæductus vallis *Ticini* frequens BIROL: fl: acon: l. p. 24. sub eadem. In pascuis glareosis ejusdem vallis etiam occurrit sed humilior et pilosior BIROL: mss: sub *Arundine sylvatica*. In monte *Gottro Liguriæ* orientalis BERTOL: l. c. p. 749. ). Vix ac ne vix quidem a priori diversa pilis valvæ externæ perigonii valde *brevioribus*, arista paullo *supra basim* inserta ac *longiore*; paniculæ in omnibus specim: meis majores, uti generatim statura totius plantæ.

VIII. PSAMMA P. de Beauv: agr: p. 143. t. 6. f. 1. =  
 Spr: syst: n. 356. = *Arundinis*, *Ammophilæ*,  
*Calamagrostidis* et *Phalaridis* spec: quorund:

» *Glumula* 1-flora 2-valvis, valvulis æqualibus  
 » compressis muticis. *Perigon*: glumula brevius 2-  
 » valve, valvulis æqualibus muticis, exteriori basi  
 » villosa apice 2-dentata mucronata, inter: basi dense  
 » barbata apice quadridentata. *Squamulæ* lanceolato-  
 » subulatæ longiusculæ. *Stam*: 3. *Stigm*: 3. sessilia  
 » plumosa. *Caryops*: turbinata libera. »

*Obs*: Genus a præcedente et ab *Arundine* satis distinctum non solum notis indicatis verum etiam habitu fere proprio, sc: foliis linearibus convolutis duris pungentibus, panicula spiciformi elongata firma, spiculis adpressis continuis, valvulis chartaceis longis acutissimis, constans 2. stirpibus europæis vix inter se distinctis.

\* 1. *Ps: arenaria* = P. de Beauv: l. c. = Spr: syst: I. 361. *Arundo arenaria* L. sp: 121. = Schrad: fl: germ: I. p. 221. t. C. f. 2. *Calamagrostis arenaria* DC. fl: fr: n. 1525. *Ammophila arundinacea* Host: gram: austr: IV. p. 24. t. 41. Bertol: fl: ital: I. p. 753. (Litoribus maris *Germanici* et arenosis *Mediterranei*. Prope *Uneliæ* ALL: n. 1266. sub *Arundine*. In arenis maritimis *Sardin*: frequens MORIS st: sard: II. p. 12.). Peren: Elata valde cæspitosa radicibus late repentibus culmis erectis longe spicatis uti folia firmissimis duris, spica colore stramineo, perigonii barba brevissima. *Ps: baltica* vix distinguitur barba longiore, spica minus densa rubicunda; invenitur in



litoribus maris *Baltici*. Huc dubitat cl: BERTOL: fl: ital: I. p. 776. in obs: referendum esse *Elymum arenarium* ALL: n. 2272. Vid: infra sub hoc genere.

### Trib: III.

BROMEÆ (Spiculæ paniculatæ 2-multifloræ sursum imperfectæ. Gen: 55. ex BARTL: p. 28. quorum nonnulla valde dubia vel in aliorum dispendium perperam creata ).

IX. *Holcus* Lin: gen: ed: Schreb: n. 1865. excl: nonnullis stirpibus = Spr: syst: n. 304. = *Holci* et *Arrhenantheri* spec: P. de Beauv: agr: t. 17. f. 10. pro primo et t. 11. f. 5. pro altero = Gaud: , Bertol: = *Avenæ* spec: nonnullæ quorund: (*Polygam: monoëc: L.* ).

» Flores polygami. *Glumula* 2-valvis 2-flora val-  
 » vulis sub-inæqualibus muticis, flore altero herma-  
 » phrodito altero masculo. *Perigon:* hermaphroditi 2-  
 » valve muticum valvulis sub-inæqualibus ( valvula  
 » exterior in *Arrhenanthero* nunc aristata ), ma-  
 » sculi valvula exterior dorsi breviter aristata. *Squa-*  
 » *mula* 1. vel 2. ( in *Arrhenanthero* ). *Stam:* 3. *Styl:*  
 » 2. stigmatibus plumosis. *Caryops:* libera intra pe-  
 » rigonium persistens. »

*Obs:* Genus obscurum, modo cum *Sorgho*, cum quo habitu quadrat, confusum, modo distinctum, vel ( ex R. Br: ) prorsus commutatum additis speciebus *Andropogoni* inflorescentiam paniculatam exhibentibus, constans ex SPR: 7. stirpibus, quarum

4. europææ, 2. ex *Ind*: orient:, 1. ex *C. B. S.* Plantæ perennes culmis erectis paniculatis; flores hermaphroditi sunt sessiles, masculi pedicellati in *Holco* vero, viceversa in *Arrhenanthero*; perigonium cartilagineum in primo, herbaceum in altero.

\* 1. *H. lanatus* = L. sp: 1485. = Spr: syst. I. 292. Bertol: fl: ital: I. p. 477. = Fl: dan: t. 1181. Ic: taur: vol. I. t. 82. Sub *Avena* DC. (*Eur*: passim. *Pedem*: ubique in pratis ALL: n. 2283. RE fl: segus: p. 82. et fl: tor: II. p. 153. BIROL: fl: acon: II. p. 140. *Genuæ* et *Sarzanæ* BERTOL: l. c. p. 478. *Sardin*: in pratis humentibus MORIS st: sard: II. p. 11.). Undique molliter pubescens, panicula ampla terminalis ramis elongatis erectiusculis, flosculi masculi arista recurvata brevissima semper intra glumulam inclusa.

\* 2. *H. mollis* = L. sp: 1485. = Spr: syst. I. 292. Bertol: fl: ital: I. p. 479. = Host: gram: austr: I. p. 3. t. 3. Sub *Avena* DC. (*Eur*: passim. *Pedem*: circa *August*: *Prætoriam* in pratis; in pascuis elatioribus di *Tenda* ALL: n. 2284. Circa arva montana RE fl: segus: p. 82. In pratis prope *Eremum* atque inter *il Martinetto* et *il Baracone* ad rivulorum margines RE fl: tor: II. p. 153. In pratis siccis et pascuis vulgaris BIROLI fl: acon: II. p. 140. E pratis *Albensib*: retulit BERTERUS. In pratis humidis *Sardin*: MORIS st: sard: I. p. 51.). Differt a priori habitu *graciliori humiliori*, paniculæ ramis *patentibus*, ac præsertim glumulæ valvis *oblongioribus*, flosculi masculi arista recta e glumula *exserta*. Panicula albo violaceo et rubello colore variat maturescendo, monente BIROLI l. c.



✱ 3. *H. avenaceus* = Scop: fl: carn: ed: 2. tom: II. p. 276. = Spr: syst: I. 292. = Engl: bot: t. 813. Ic: taur: vol. 1. t. 81. et vol: 13. t. 9. Sub *Arrhenanthero* P. de Beauv; agr: p. 9. t. 11. f. 5. et Bertol: fl: ital: I. p. 484. *Avena elatior* L. sp: 117. Fl: dan: t. 165. (*Eur: passim. Pedem: inhabitat pascua montana et aprica ALL: n. 2285. In omnibus pratis vallis Segusianæ RE fl: segus: p. 13. sub Avena elatiori. In pratis pinguibus agri Taurinens: copiosus RE fl: tor: II. p. 153. In pratis pinguibus agri Novar: uti a Prella BIROLI fl: acon: I. p. 34. sub Avena elatiori. In campis Sarzanæ et in pratis prope Margozzo in valle d'Ossola BERTOL: l. c. p. 485. In Sardin: pratis MORIS st: sard: I. p. 51.*). Radix nodoso-fibrosa nunc bulbosa, panicula laxiuscula, perigonii hermaproditii valvula exterior sub-aristata, masculi semper aristata arista glumula duplo longiore, quod ei inflorescentiæ habitum a præcedentibus diversum tribuit. Variat geniculis culmi *villosis*, radice *bulbosa* (*H. bulbosus* SCHRAD:, *Avena bulbosa* W.), quod tamen inconstans esse observarunt SMITH:, HOOK:, BERTOL: etc.

X. AVENA Lin: gen: ed: Scrb: n. 122. excl: paucis stirpib: = Spr: syst: n. 338. = Lam: ill: t. 47. = *Avenæ, Triseti, Trisetaricæ, Arundinis, Festucæ, Bromi, Dantonicæ, Aristidæ, Tripogonis et Gaudiniæ* spec: nonnullæ quorund:

» *Glumula* 2-valvis 2-8-flora, valvulis membranaceis muticis. *Perigon:* 2-valve, valvula exterior majore apice 2-fida e dorso aristam geniculatam tortilem emittente, lacinulis sæpe setigeris, inter:

» 2-fida mutica. *Squamulæ* 2. *Stam:* 3. *Styl:* 2. stig-  
 » matibus dense plumosis. *Caryops:* oblonga libera  
 » soluta vel intra perigonium retenta. »

*Obs:* Genus pro nonnullis stirpibus non satis apte determinatum, constans ex *SPR:* 55. circiter speciebus per orbem sparsis, multis europæis, annuis, vel perennibus, foliis linearibus, floribus sæpius paniculatis vel racemosis, rarius (in *Gaudinia*) spicatis, glumis nitidis. Ex numero flosculorum in glumula melius quam ex inflorescentia aliisve notis artificiales sectiones statui possunt. *Cons:* tamen dispositionem specierum in *GAUD:* fl: helv: I. p. 329.

#### 1. Glumula 1-flora.

1. *A. sativa* = L. sp: 118. (Patria?). *Ann:* Panicula æqualis ampla laxa, glumula (sæpius) 2-flora valvulis perigonio basi sub-nudo longioribus; vera patria incerta; quidam ei tribuerunt insulam *Juan-Fernandez*, sed ibi uti in *Chili* et nunc undique in *Eur:* ex cultura spontanea evasit; abunde colitur penes nos sub nom: vern: *Biava*, et præsertim in collinis et locis apricis ubi cetera cerealia difficile ad maturitatem perveniunt; variat statura, numero flosculorum, præsentia vel defectu aristæ, seminum colore albo vel nigro etc. Ab hac parum differt *A. orientalis* *SCHREB:* panicula *coarctata secunda*, quæ permixta occurrit cum *sativa*.



## 2. Glumula 3-flora.

\* 2. *A. fatua* = L. sp: 118. = Spr: syst: I. 334. Bertol: fl: ital: I. p. 694. = Host: gram: austr: II. p. 42. t. 58. Vern: *Biavas*, *Biava servaja* uti generatim ceteræ stirpes indigenæ (*Eur.*; *Asia*. Frequentissima secus agros et in pascuis collium calidiorum *Nicæens*: ALL: auct: p. 44. n. 2255. In campis circa *Novar*: frequens BIROLI fl: acon: I. p. 34. *Genuæ* et *Sarzanæ* BERTOL: l. c. p. 695. Inter *Sardin*: segetes MORIS st: sard: I. p. 50. ). Ann: Elata, panicula ampla æqualis diffusa, flosculi omnes inferne hirsuti et aristati, aristæ elongatæ infra geniculum nudæ. Huc pertinet *A. atherantha* PRESL: eadem ac *A. hirsuta* ROTH: sec: BERTOL: l. c. p. 696., nec non *A. barbata* BROTH: sec: SPR:

\* 3. *A. pubescens* = L. sp: app: 1665. = Spr: syst: I. 334. Bertol: fl: ital: I. p. 702. = Host: gram: austr: II. p. 37. t. 50. Sub *Triset* R. et S. (*Eur*: passim. *Pedem*: abunde in pratis alpinis ALL: n. 2256. In pratis alpinis potius rara, alpibus *del Margo* etiam occurrit BIROLI fl: acon: I. p. 34. ). Peren: Repens puberula, panicula simpliciuscula coarctata apice cernua ramis abbreviatis, flosculi basi et stipite barbati glumulam brevem sub-æquantes, arista tenuis valvula exteriori paullo longior. Variat foliis vaginisque glaberrimis, flosculo supremo abortivo breviori (var:  $\beta$  *alpina* GAUD: fl: helv: I. p. 334. ). Huc videtur pertinere *A. sesquitertia* L. mant: 34. quæ

crescit in pratis montanis alpium *Valdensium* ALL: n. 2260. excl: syn: SCHEUCHZ.

\* 4. *A. tenuis* = Moench: meth: p. 195. = Spr: syst: I. 334. Bertol: fl. ital: I. p. 697. = Host: gram: austr: II. p. 40. t. 55. *A. dubia* Leers hb: p. 41. t. 9. f. 3. *A. triaristata* Vill: *A. fertilis* All: auct: 2255. p. 45. *Trisetum striatum* et *Tr: tenue* Pers: , R. et S. (*Eur: collibus. Pedem: in agris avenæ Montisregalis* ALL: l. c. c. descr:). Ann: Cæspitosa flexuosa tenuis puberula, folia angustissime linearia breviuscula, panicula valde laxa ramis remotiusculis tenuissimis sub-simplicibus, flosculus infimus basi nudus valvula exteriori carente arista dorsali apice tamen setaceo-aristata, flosculi superiores basi barbati valvula exteriori tenuiter dorso aristata apice 2-seta, omnes glumula longiores.

\* 5. *A. distichophylla* = Vill: dauph: II. p. 144. t. 4. f. 4. non Pollin: = Spr: syst: I. 334. = Bertol: fl: ital: I. p. 719. Sub *Triseti* P. de Beauv., R. et S. (*Alpib: Rhetic: , Delphinat: et Helvet: Pedem: locis rupestribus et montanis Alpium Valdensium* minime rara ALL: auct: p. 44. Abunde in pascuis *M. Cenisii* et signatim inter saxa ascendendo jugum *Ronche* dictum RE fl: segus: p. 14. In alpibus *Siccidis* BIROLI fl: acon: I. p. 35.). Peren: Repens decumbens, folia abbreviata disticha plana glauca, panicula breviuscula composita pauci- et laxi-flora, flosculi glumulam cuspidatam æquivalvem basi stipiteque longe barbatis valvula exteriori supra medium brevi aristata utraque apice 2-fido setigera. *A. distichophylla* POLLIN:



perlinet ad *argenteam* W. nec invenitur in albis nostris.

6. *A. gracilis* = Moris st: sard: I. p. 50. (*Sardin*: in pascuis *M. Genargentu*, *S. Padre* et *Macomer* MORIS l. c.). Priori affinis, sed radice nec articulata nec repente, culmis erectis, glumula sæpius 4-flora diversa.

\* 7. *A. flavescens* = L. sp: 118. = Spr: syst: I. 334. Bertol: fl: ital: I. p. 715. = Host: gram: austr: III. p. 26. t. 38. Sub *Trisetu* R. et *S. Trisetum pratense* Pers: ench: I. p. 97. (*Eur*: passim. *Pedem*: ubique frequens in pratis et pascuis montanis et sub-alpinis ALL: n. 2257. RE fl: segus: p. 13. et fl: tor: I. p. 80. BIROLI fl: acon: I. p. 34. *Sarzane* in monte *Caprione*, *Genue* in locis herbidis copiosissima BERTOL: l. c. p. 717. *Sardin*: in montanis MORIS st: sard: I. p. 50.). Peren: Sub-repens villosa, folia elongata plana, panicula longiuscula composita ramosissima multi- et laxi-flora, flosculi glumulam inæquivalvem acuminatam sub-excedentes basi stipiteque brevissime barbati valvula exteriori supra medium longiuscula aristata utraque apice 2-fida. Variat floribus violaceo-auratis nitidis (*A. purpurascens* et *alpestris* DC.); hæc crescit potius in montanis illamque habeo ex *M. Cenisio*.

\* 8. *A. neglecta* = W. en: I. p. 124. = Spr: syst: I. 334. Bertol: fl: ital: I. p. 713. = Savi fl: pis: I. p. 132. t. 1. f. 4. Sub *Trisetu* R. et *S. Trisetum hispanicum* β Pers: *Avena panicea* Lam: *A. pumila* Desf: *A. Loeflingiana* Balb: (*Ital*., *Gallia merid*., *Hispan*., *Afr*: bor: *Pedem*: in collibus *di Nux*, in

valle *Augustæ Prætoriae*, inter *Cinzano* et *Moncucco* loco dicto *Amprelli*, circa *Segus*: prope il *Forest* BALB: misc: bot: p. 12. sub *A. Loeftlingiana*, excl: syn: POLLIN: RE fl: segus: p. 13. In campis et pratis siccis non rara BIROLI fl: acon: I. p. 35. *Sarzanæ* in via circa oppidum ad septentrionem BERTOL: l. c. p. 714.). Ann: Molliter pubescens, folia lineari-latiuscula, panicula breviuscula spiciformis multi- et densi-flora ramosissima ramis strictis, flosculi glumulam sub-excedentes nitidi basi imberbes valvula exteriori supra medium breviter aristata utraque apice setoso vel mutico 2-fida.

9. *A. parviflora* = Desf: fl: atl: I. p. 103. t. 32. *Festuca segetum* SAVI fl: pis: I. p. 116. t. 1. f. 3. (*Ital*: merid:, *Afr*: bor: *Sardin*: in pascuis montanis frequens MORIS st: sard: I. p. 50.). Ann: Pubescens tenuis, panicula mediocris multi- et laxi-flora ramosissima ramis diffusis, flosculi parvuli glumulam inæquivalvem sub-excedentes glabri basi callosi imberbes valvula exteriori parum infra apicem tenue longeque aristata utraque apice 2-dentata. Facies *Agrostidis Spicæ venti*; fructificatio *Avenæ*. Huc spectat *Festuca segetum* SAVI quam el: RE app: II. p. 191. asserit habuisse ex arvis *Albæ* a D. TARABRA, quod valde dubito præsertim cum sollertissimus BERTERUS de hac stirpe sub ullo nomine mentionem numquam fecerit.

\* 10. *A. setacea* = Vill: dauph: II. p. 144. t. 5. = Spr: syst: I. 335. = Bertol: fl: ital: I. p. 707. (*Alpib*: *Delphinat*: *Pedem*: in montibus di *Limone* reperit BELLARD: app: p. 12.). Ann: ? Cæspitosa elatiuscula glabra, folia filiformia juncea rigida vaginis



in radicalibus striatis ac valde dilatatis, panicula breviuscula sub-simplex pauciflora apice sub-nutans, flosculi grandiusculi glumulam inæquivalvem ciliolatam sub-æquantem glabriusculi basi stipiteque barbati valvula exteriori infra medium longiuscula aristata utraque apice acuta 2-dentata. Perperam a nonnullis confusa cum *A. aurata* ALL: quam vidimus ad *Agrostidem rupestrem* W. pertinere.

### 3. Glumula 4-flora.

\* 11. *A. sterilis* = L. sp: 118. = Spr: syst: I. 335. Bertol: fl: ital: I. p. 692. = Host: gram: austr: II. p. 42. t. 57. (*Eur: austr: Pedem: in agris collinis calidioribus* ALL: auct: p. 44. RE fl: segus: p. 13. et fl: tor: I. p. 80. *Genuæ* in collibus *al Lagazzo* et *Sarzanæ* in graminosis collium BERTOL: l. c. p. 693. Inter *Sardiniae* segetes MORIS st: sard: I. p. 50.). Ann: Facie *A. fatuæ* n. 2. sed statura undique parum *major*, glumula 4-flora, et aristis infra geniculum *hirsutis* diversa.

\* 12. *A. sempervirens* = Vill: dauph: II. p. 140. t. 5. = Spr: syst: I. 335. = Bertol: fl: ital: I. p. 698. (*Alpib: Eur: med: Pedem: abunde in montibus di Carlin la Briga* proximisque, in *M. Cenisio* supra *le Ferrere* et in *M. Lavenoise* ALL: auct: p. 45. RE fl: segus: p. 14. In pascuis *Ossitanis* dictis a *Craveggia* BIROLI mss:). Peren: Cæspitosa glabra, folia linearia latitudine valde inæqualia rigida acuta vaginis fere ut in *A. setacea* n. 10. cui accedit, sed non tam dilatatis, panicula mediocris sub-composita, ramis flexuo-

sis sub-multifloris, flosculi grandiusculi valvulam glumulæ majorem sub-æquantés basi barbati valvula exteriorē oblongo-lanceolata infra medium longiuscule aristata.

\* 13. *A. versicolor* = Vill: dauph: II. p. 142. t. 4. f. 5. = Spr: syst: I. 335. = Bertol: fl: ital: I. p. 706. *A. Scheuchzeri* All: n. 2259. (Alpib: Eur: med: *Pedem*: in pascuis editioribus non infrequens, copiosa inter *Bramant* et *le Barricade* ALL: l. c. In monte *Musinè* RE fl: tor: I. p. 81. In alpibus *Siccidis* BIROLI fl: acon: I. p. 35. In Apennino *di Bobbio* BERTOL: l. c. p. 707.). Peren: Glabra sub-simplex, folia plana breviuscula nuda, panicula abbreviata stricta ramis solitariis vel geminis variegato-1-2-locustiferis, flosculi acuti vel laceri basi brevissime barbati glumulam superantes valvula exteriorē acuminata supra medium longiuscula aristata utraque apice 2-cuspidata.

\* 14. *A. fragilis* = L. sp: 119. = Spr: syst: I. 336. Bertol: fl: ital: I. p. 713. = Host: gram: austr: II. p. 40. t. 54. Sub *Gaudinia* P. de Beauv., R. et S. (Eur: austr:, *Græcia*. In litore maris *Mediterranei* BALE: addit: p. 86. *Sarzanæ* in pratis et in litore *alla Marinella*, *Liguria* occidua ad *Albingaunum* BERTOL: l. c. p. 724. In collinis *Sardin:* vulgatissima MORIS st: sard: I. p. 50.). Ann: Cæspitosa pubescens, folia anguste linearia striata, spica linearis elongata sub-composita rachide articulata, spiculæ alternæ sessiles, flosculi grandiusculi terminales sæpe abortivi glumulam inæquivalvem multo superantes, valvula exteriorē supra medium longe aristata utraque apice acuta 2-dentata.



## 4. Glumula 5-flora.

● 15. *A. pratensis* = L. sp: 119. = Spr: syst: I. 336. Bertol: fl: ital: I. p. 704. excl: *A. bromoidea* et *caryophyllea* = Host: gram: austr: II. p. 38. t. 51. (*Eur*: passim. *Pedem*: in pratis præsertim collinis et montanis ALL: n. 2257. In pratis *M. Cenisii* RE fl: segus: p. 13. In *M. Musinè* RE fl: tor: I. p. 81. In pratis siccis et pascuis BIROLI fl: acon: I. p. 35. *Genuæ* in editis montis *Fasce* et in *Liguria* occidua in alpibus *della Scaggia* retro *Pegli* alibique BERTOL: l. c. p. 705.). Peren: Elata glabriuscula, folia anguste linearia obtusiuscula margine serrulato-scabra, racemus simpliciusculus ramis brevissimis pauci- et laxifloris, flosculi acuminati basi brevissime barbati glumulam inæquivalvem superantes valvula exteriori supra medium longe aristata utraque apice 2-cuspidata.

● 16. *A. bromoides* = L. sp: 1666. = Spr: syst: I. 336. = Scheuch: gram: 228. t. 4. f. 21. 22. sec: W. sp: I. 453. *A. pratensis* var: Hall: DC. Bertol: (*Gallia* austr.: , *Ital*.: , *Hispan*: *Pedem*: in pascuis saxosis inter *il Rifredo* et *Val di Pesio*, frequens in summitatibus Alpium *Monregalensium* soli expositis, atque in Comit: *Nicæens*: ALL: auct: p. 46. n. 2259. In pascuis saxosis supra *Cavoretto* RE fl: tor: I. p. 81. In collibus sterilibus *di Ameno* BIROLI fl: acon: I. p. 35.). Priori valde affinis sed distinguitur præsertim racemo *simpliciori*, spiculis brevissime pedicellatis sub-

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*multifloris* pedicellis *sub-geminis*, flosculis basi *nudis* apice *obtusis erosis*. Glumula quandoque 8-flora occurrit. Observavit cl: ALL:, racemum sæpius spiciformem evadere paniculatum in pascuis saxosis calidiorum collium et montium. *A. caryophyllea* SIETH: quam cl: BERTOL: cum *pratensi* etiam conjunxit, magis accedere videtur ad *Oromoideam*, sed tota glaucescens, folia non serrulata, flosculi constanter numerosiores. Cons: tamen SMITH: in Linn: trans: X. p. 336.

*Species magis dubiæ:*

Innumera exemplaria dubia possideo sub variis nominibus quæ generatim ad *A. sativam* vel *pratensem* pertinere videntur: sequentia autem prorsus mihi incerta sunt. = 17. *A. splendens* = Sp: nov: Ita in scheda ex hb: BELLARDI, Binas sub hoc nomine species video citatas ab Auctoribus, sc: *A. splendens* Gallorum a R. et S. syst: II. p. 674. sub *A. pratensi*; et *A. splendens* Guss: a Bertol: sub *A. flavescente*. Planta Bellardiana ab utraque recedit, a priori statura undique minori, foliis brevioribus angustioribus margine integerrimis, racemo simplicissimo 2-8-tantum loculifero, flosculis glumulam sub-æquivalentem æquantibus; ab altera autem, præter inflorescentiam toto cælo diversam, aliis notis de quibus in diagnosi sequenti. Bona species mihi videtur, propterea illam Auctori dico ne cum aliis *A. splendidibus* confundatur. « *A. Bellardi* Nob: *A. cæspitosa* glabra erecta, foliis radicalibus anguste linearibus brevibus » rigidis late vaginatis, vaginis striatis, culmis sub-nullis



» nudis; racemo simplicissimo, locustis paucis sub-  
 » secundis; glumula sub- 2-flora, valvis lanceolatis  
 » acuminatis sub-æqualibus; flosculis basi setuloso-  
 » barbatis, valvula exteriori supra medium longe  
 » aristata, utraque apice inæqualiter et acute 2-  
 » dentata. » (In monte *Ventoun* ex scheda). = 18.

*A. montana* = Bellard: in sched: Pariter sub hoc nomine a Spr: omisso variæ veniunt species penes Auctores, uti videre est in Steud: Exemplar meum ab *A. pubescenti* n. 3. non differt nisi spiculis subsecundis et glumulis flosculisque longioribus. = 19.

*A. intermedia* = Bellard: in sched: Ludit inter *A. setaceam* n. 10. et *sempervirentem* n. 12. a quibus videtur tantum differre vaginis angustioribus et panicula ampliore.

XI. DANTHONIA DC. fl: fr: III. p. 32. excl: *D. decumbente* = Spr: syst: n. 336. = P. de Beauv: agrost: p. 92. t. 18. f. 7. = *Avenæ*, *Antistirix*, *Airæ* et *Arundinis* spec: nonnullæ quorund:

» *Glumula* 2-valvis multiflora, valvulis sub-æqualibus maximis concavis. *Perigon*: 2-valve glumula brevius (an semper?) basi barbatum, valvula exteriori apice divaricata 2-fida inter lacinias aristam tortilem emittente, interiore integra. *Caryopsis* libera. Cetera *Avenæ*. »

Obs: Structura perigonii distinguit præsertim hoc genus ab *Avena*, cui habitu valde simile; constat autem 12. circiter stirpibus, quarum 1. tantum europæa, 2. americanæ, ceteræ ex C. B. S. vel N. Holl:

\* 1. *D. provincialis* = DC. fl: fr: n. 1544. = Spr: syst: I. 331. Bertol: fl: ital: I. p. 726. = *Avena calycina* Vill: dauph: II. p. 148. t. 2. f. 9. *A. spicata* All: auct: p. 45. non L. *A. spicata*  $\beta$  W. sp. I. 453. (*Gallia* austr:, *Ital: Pedem:* abunde in universa valle de la Tour atque ultra eam eundo ad jugum Col di S. Giovanni, tum etiam in montibus di Piosasco, Casellette, Cumiana et sylvis della Veneria ALL: l. c. Frequens in M. Musinè RE fl: segus: p. 13. In pascuis sterilibus prope la Mandria et in summis collibus Taurinensib: RE fl: tor: I. p. 81. In summis collibus Burgimaneri BIROLI fl: acon: I. p. 35. omnes sub *Avena spicata*. Prope Sarzana in M. Nuda qua descenditur ad canalem di Blaso, Liguria occidua in alpibus della Scaggia retro Pegli BERTOL: l. c.). Peren: Erectiuscula glabriuscula, folia angustissima ligula barbata, racemus simplex spicæformis abbreviatus, glumula sub- 5-flora turgida, flosculi villosi valvula exterior 9-nervi. Vera *Avena spicata* L., cum qua plantam pedemontanam commutavit cl: ALL: Amer: bor: inhabitat, et differt habitu graciliori, omnibus partibus minoribus, valvula perigonii exterior 5-nervi, arista breviori.

XII. TRIODIA R. Br: Prodr: ed: 1. p. 182. ed: 2 p. 38. = Spr: syst: n. 335. = P. de Beauv: agrost: p. 76. t. 15. f. 9. = *Festucæ*, *Pocæ*, *Danthoniæ*, *Windforiæ*, *Airæ*, *Grapphephori* et *Dactylidis* spec: nonnullæ quorund:

» Glumula 2-valvis multiflora, valvulis chartaceis  
 » sub-æqualibus. Perigonii valvula exterior 5-nervi

» multi-nervi basi utrinque penicillata apice breviter  
 » 3-dentata, denticulo medio brevior. Cetera fere  
 » ut in *Danthonia*. »

*Obs:* Genus a præcedenti vix distinctum defectu  
 veræ aristæ, habitu tamen magis ad *Poam* vel *Fes-  
 tucam* accedens, constans 15. circiter stirpibus pe-  
 rennibus rigidulis stricte paniculatis, inter quas 4.  
 tantum europææ, altera asiatica, 3. americanæ, ce-  
 teræ ex *N. Holl:*

\* 1. *Tr: decumbens* = R. et S. syst: II. p. 597.  
 = Spr: syst: I. 330. Bertol: fl: ital: I. p. 558. = P.  
 de Beauv: agrost: t. 15. f. 9. Sub *Festuca* L. sp: 110.  
 Fl: dan: t. 162. Sub *Poa* Schrad: Sub *Danthonia* DC.  
 (*Eur:* passim. *Pedem:* in pratis et pascuis non irri-  
 guis ALL: n. 2246. In montanis frequens RE fl: segus:  
 p. 13. In pascuis sterilibus *della Mandria* et collium  
*Taurinens:*, nec non in sylvis *Stupinixii* RE fl: tor:  
 I. p. 74. In pascuis siccis *S. Petri di Morezzo* fre-  
 quens BIROLI fl: acon: I. p. 32. omnes sub *Festuca*.  
*Sarzanæ* in collibus *di Triboli* et in monte *Caprione*,  
*Liguria* occidua in valle *d'Andora*, *Confienza* in *Lo-  
 mellina* BERTOL: l. c. p. 559.). Peren: Cæspitosa sæ-  
 pius decumbens duriuscula, folia angustissima elon-  
 gata sæpius pilosa vaginis superne barbatis, panicula  
 simpliciuscula stricta brevis pauci-locustifera, glumula  
 sub- 5-flora, perigonii valvula exterior 9-nervis den-  
 tibus obtusiusculis interior minor apice 2-dentata.

XIII. MELICA Lin: gen: ed: Schreb: n. 113. excl: 2.  
 stirpib: = Spr: syst: n. 293. = Lam: ill: t. 44.

» *Glumula* chartacea flosculos sub-æquans 2-valvis



» 3-4-flora, flosculis alternis 1-2. inferioribus perfectis sessilibus reliquis pedicellatis abortivis. In flosculis perfectis *perigon*: 2-valve, valvulis inæqualibus muticis. *Squamulæ* 2. truncatæ. *Caryops*: libera lævis intra perigonium persistens. »

*Obs*: Genus fructificatione et habitu fere proprio satis distinctum, constans 20. circiter stirpibus per orbem sparsis, quarum media pars circiter europæa. Herbæ perennes erectæ vel adscendentes, floribus paniculatis vel racemosis, spiculis erectis vel nutantibus sæpe coloratis, flosculis glabris vel barbatis.

### 1. *Flosculis glabris.*

\* 1. *M. uniflora* = Retz: obs: I. p. 10. = Spr: syst: I. p. 279. Bertol: fl: ital: I. p. 491. = Host: gram: austr: II. p. 9. t. 11. *M. Lobelii* Vill: dauph: II. p. 89. t. 3. All: auct: p. 44. (*Eur*: passim. *Pedem*: in sylvis collium *Taurinens*: ALL: l. c. Prope *Segus*: in regione *delle Gorgie* RE fl: segus: p. 12. In locis umbrosis sylvarum *Taurinens*: et *della Mandria* RE fl: tor: I. p. 64. In sylvis *Novariensib*: BIROLI fl: acon: I. p. 27. *Sarzanæ* in colle *di Sarzanello* et ad canales umbrosos *M. Caprione* BERTOL: l. c. p. 492. In sylvis prope *Ovada* VIV: fragm: fl: ital: n. 8. Ad sepes umbrosas *Sardin*: centralis MORIS st: sard: II. p. 11.). Repens sub-cæspitosa pilosiuscula, folia latiuscula linearia vaginis arctis striatis, racemus subsimplex rari- et pauci-locustiferus, spiculæ erectæ saturate purpureæ sub- 3-floræ flosculo fertili solitario.

\* 2. *M. nutans* = L. sp: 98. non Pollich: nec

Cav: nec Savi = Spr: syst: I. 279. Bertol: fl: ital: I. p. 493. = Host: gram: II. p. 9. t. 10. *M. montana* DC. fl: fr: n. 1539. ex Huds: (*Eur: passim. Pedem: ubique in sylvis ALL: n. 2251. Prope Segus: in regione di Croale RE fl: segus: p. 11. In sylvis facile obvia RE fl: tor: I. p. 64. In sylvis collium et illis della Vesca in valle Arbogna prope Novariam BIROLI fl: acon: I. p. 27. In Apenninis della Bocchetta Viv: fragm: fl: ital: l. c. de qua statione tamen silet BERTOL:). Differt a priori, cui valde affinis, præsertim statura *altiori et robustiori*, racemo generatim *simpli-ciori*, spiculis sub-secundis *nutantibus* sub- 4-floris, flosculis fertilibus *binis*. *M. nutans* POLLICH: pertinet ad priorem, *nutans* CAV: ad sequentem, *nutans* SAVI ad *pyramidalem*.*

\* 3. *M. minuta* = L. mant: I. p. 32. n. 5. = Bertol: fl: ital: I. 497. = *M. nutans* Cav: ic: II. p. 58. n. 192. t. 175. f. 2. *M. aspera* Spr: syst: I. 279. pro planta genuensi non pro planta Desf: (*Ital: , Græcia. Pedem: in collibus Aquensibus ALL: n. 2252. Genuæ in via quæ ducit al Lagazzo, in agro Nicæens: BERTOL: l. c. Sardin: in pascuis collinis montanisque MORIS st: sard: I. p. 51.* ). Statim distinguitur a præcedentibus statura undique *minori*, foliis *convolutosetaceis* culmisque *sub-cæspitosis*, spiculis secundis *nutantibus remotioribus* quam in *M. nutante* L., glumula *acuta (obtusâ in nutante)* flosculo sub-breuiore. Huic proxima est *M. ramosa* VILL: quam cl: DC. fl: fr: suppl: p. 258. monet *Nicææ* etiam crescere, quod non indicat BERTOL: fl: ital: I. p. 496. De hac unicum possideo specim: ex PERRET sine loci natalis indica-

tione, unde illam enumerare non audeo inter plantas indigenas; ceterum ludit inter *M. minutam* et *pyramidalem*; habitu tamen primæ, cujus forsitan var., magis accedit.

\* 4. *M. pyramidalis* = R. et S. syst: II. p. 525. = Spr: syst: I. 279. Bertol: fl: ital: I. p. 496. = Barr: ic: 96. f. 1. *M. nutans* Savi non alior: *M. major* Sibth: fl: græc: prodr: I. p. 51. (*Ital: Græc: Sarzanæ* in summitate montis *Darme* inter saxa, *Liguria* occidua a *Laigueglia* BERTOL: l. c. *Sardin:* ad sepes MORIS st: sard: I. p. 51.). Elata sub-cæspitosa glabriuscula, folia latiuscula linearia planiuscula rigidiuscula ligula elongata sub-lacera, panícula laxiuscula ramis flexuosis multi-locustiferis, locustæ nutantes ex viridi albo-purpureæ, glumula 4-flora acula flosculis (fertilibus 2.) sub-brevior.

## 2. *Flosculis barbatis.*

\* 5. *M. ciliata* = L. sp: 97. = Spr: syst: I. 280. Bertol: fl: ital: I. p. 487. = Host: gram: austr: II. p. 10. t. 12. (*Eur: med: et austr: Pedem: locis montanis alpestribus apricis sæpissime occurrit* ALL. n. 2250. Frequens in saxosis montanis, passim ad muros vineas di *Mompantero* circumeuntes RE fl: segus: p. 11. Prope *l'Arsenale* et supra montem *Musinè* RE fl: tor: I. p. 63. In rupibus alpestribus vallis *Ossulæ* frequens BIROLI fl: acon: I. p. 26. *Sarzanæ* in summitate montis *Darme* BERTOL: l. c. p. 488. Ex agro *Nicæens:* retulit RE. *Sardin:* in apricis sterilibus MORIS st: sard: I. p. 51.). Repens elata striata pubescens,



racemus spiciformis elongatus cylindricus spiculis coarctatis erectis, glumula 2-3-flora valvulis inæqualibus, flosculi fertilis valvula exterior prope marginem tota barbata interior minor vix nervo ciliolata ceterum glabra apice 2-dentata.

\* 6. *M. Bauhini* = All: auct: p. 43. non Guss: = Spr: syst: I. 280. Bertol: fl: ital: I. p. 490. = Host: gram: austr: IV. p. 14. t. 23. *M. setacea* Pers: (*Eur: austr: In comit: Nicæens: locis rupestribus aridis ALL: l. c. c. descr: In rupestribus Liguriæ occidentæ a Lai-queglia BERTOL: l. c.*). Vix differt a priori racemo *secundo laxiore inferne ramoso*, glumulæ valvulis *subæqualibus*, flosculi fertilis valva exterior prope marginem *inferne tantum vix barbata*; quandoque occurrit alius ex flosculis superioribus æque fertilis sed minor et valvula exterior prorsus nuda.

XIV. MOLINIA Schrank: Bayr: fl: p. 336. = Spr: syst: n. 294. = P. de Beauv: agrost: p. 10. t. 14. f. 6. = *Melicæ, Airæ, Festucæ et Enodii* spec: quorund:  
 » *Glumula* 2-valvis sub- 3-flora perigonio multo  
 » brevior, flosculo supremo abortivo. In flosculis per-  
 » fectis *perigon: 2-valve*, valvulis lanceolatis acu-  
 » tis, exterior 3-nervi lævi. *Caryops: semi-sulcata*  
 » styli vestigiis persistentibus 3 - mucronata. Cetera  
 » *Melicæ.* »

*Obs:* Genus vix a *Melica* distinctum ac constans unica stirpe sequenti.

\* 1. *M. cærulea* = Schrank: l. c. n. 201. = Bertol: fl: ital: I. p. 499. = P. de Beauv: l. c. *M. varia* Spr: syst: I. 498. *Melica* et *Aira cærulea* L.

*Enodium cæruleum* R. et S. *Festuca cærulea* DC.  
 Vern: *Gioncairola*, *Torlo* (Eur: passim. *Pedem*: secus torrentes in sabulosis et locis montanis sterilibus ALL: n. 2253. In omnibus pascuis humidis montanis RE fl: segus: p. 11. In valle *Salicum*, secus *Sturam* atque in sylvis *della Mandria* alibique RE fl: tor: I. p. 64. In sylvis sterilibus *Aconiae* BIROLI fl: acon: I. p. 27. omnes sub *Melica*. *Sarzanæ* in sylvis *alla Fondachetta*, in *Pratola* et ad proximum sacellum Virginis di *Castiglione*, *Liguria* orientali in montibus *del Bracco*, *Genuæ* in altiori jugo *dei due Fratelli* et in *Liguria* occidua in sylvis *Vulteriensibus* supra *l'Acqua Santa* BERTOL: l. c. p. 500.). Peren: Glabriuscula rigida basi sub-bulbosa altitudine mire varia 1- vel raro 2-noda, folia late linearia striata elongata, ligula barbata, panicula composita ramis remotis laxè multifloris, locustæ parvulæ ex cæruleo purpureæ.

XV. GLYCERIA R. Br: Prodr: ed: 1. p. 179. ed. 2. vol. I. p. 35. = Spr: syst: n. 351. = P. de Beauv: agrost: p. 13. t. 19. f. 7. = *Poæ*, *Festucæ* spec: quorund:

» *Glumula* 2-valvis multiflora, spiculis teretibus  
 » muticis. *Perigon*: 2-valve imberbe, valvulis æqualibus. *Squama* 1. carnosa semi-scutellata. *Caryops*:  
 » libera oblonga hinc sulcata. »

*Obs*: Genus ludens inter *Poam* et *Festucam*, constans pariter unica stirpe.

\* 1. *Gl: fluitans* = R. Br: l. c. = Spr: syst: I. 518. P. de Beauv: l. c. Sub *Poa* Bertol: fl: ital: I. p. 518. = Engl: bot: I. 1520. Sub *Festuca* L. sp. 111.

Fl: dan: t. 237. (*Eur: fossis, N. Holl: Pedem: secus fossas ad fluentes aquas ALL: n. 2249. RE fl: segus: p. 13. BIROLI fl: acon: I. p. 32. omnes sub Festuca. RE fl: tor: I. p. 65. sub Poa. Sarzanæ in fossis al Fondamento BERTOL: l. c. p. 519. Sardin: in uliginosis MORIS st: sard: I. p. 51.*). Peren: Repens culmis fluitantibus ad nodos radicanibus, folia late linearia striata acuta ligula integra vel laciniata, panicula composita longissima ramis alterne sub-fasciculatis multi-locustiferis locustis lanceolato-linearibus alternatim ramo adpressis.

XVI. BRIZA Lin: gen: ed: Schreb: n. 115. = Spr: syst: n. 344. = Lam: ill: t. 45.

» *Glumula* 2-valvis multiflora, spiculis compresso-turgidis disticho-imbricatis muticis valde brevior.  
 » *Perigon:* 2-valve valvulis inæqualibus, exteriore majore basi cordata, interiore ovata sub-reversa.  
 » *Squamulæ* 2. integræ. *Caryops:* obovata 2-rostrata  
 » perigonio persistente basi cohærens. »

*Obs:* Genus inflorescentia præsertim facile distinguendum et habitum fere proprium referens, constans 9-10. stirpibus per orbem sparsis, præsertim europæis, annuis vel perennibus, foliis latiuscule linearibus, panicula laxa flexuosa ramis plerumque nutantibus, floribus nitidis.

\* 1. *Br: maxima* = L. sp: 103. = Spr: syst: I. 348. = Lam: ill: t. 45. f. 2. Host: gram: austr: II. p. 23. t. 30. *Br: maxima* et *monspessulana* All: nn. 2216. 2220. Ic: taur: vol. 1. t. 83. et vol. 8. t. 27. f. 1. (*Eur: austr: Frequens in agris comit: Nicæens:*



ALL: l. c. Copiosa in herbidis totius *Liguriæ*, *Sarzanæ* in collibus et inter segetes, *Genuæ* al *Lagazzo* BERTOL: l. c. p. 566. *Sardin:* in pascuis et in arvis MORIS st: sard: I. p. 50.). Ann: Erecta vel adscendens, folia striata scabrida ligula eroso-denticulata, panicula simpliciuscula apice nutans spiculis amplis ovato-cordatis compresso-turgidis 5-20-floris tremulis sæpius stramineis valvula perigonii exteriori glabriuscula late cordato-acuta interiore multo minore elliptica ad alam nervorum ciliata. Variat statura, numero florum, spicularum colore etc. *Br: monspessulana* GOUAN: et ALL: quæ iisdem locis ac maxima invenitur, non differt nisi statura undique minori spiculisque generatim 5-floris.

\* 2. *Br: media* = L. sp: 103. = Spr: syst: I. 349. Bertol: fl: ital: I. p. 563. = Host: gram: austr: II. p. 22. t. 29. Ic: taur: vol. 1. t. 84. (*Eur: passim. Pedem: vulgatissima* in pratis ALL: n. 2217. Re fl: segus: p. 12. et fl: tor: I. p. 69. BIROL: fl: acon: I. p. 29. *Genuæ* in monte *Fasce* copiosa, *Liguria* occidentua in collibus *di Pegli* BERTOL: l. c. p. 564.). Statim distinguitur a priori radice *perenni*, ligula *sub-integra*, panicula *erecta patula*, spiculis *parvis rotundatis* 3-7-floris *viridiusculis*, glumula flosculi *parum* brevior.

\* 3. *Br: minor* = L. sp: 102. = Spr: syst: I. 349. Bertol: fl: ital: I. p. 561. = Host: gram: austr: II. p. 22. t. 28. (*Anglia, Gallia, Eur: austr:, Græcia, Brasil: Pedem: frequens* in pratis ALL: n. 2215. Frequens secus arva locis calidioribus agri *Pedemon-tani*, *Canapiciensis* et *Nicæens*: ALL: auct: p. 41. In

arvis prope *Stupinixium* RE fl: tor: I. p. 69. In arvis circa *Novariam* BIROLI fl: acon: I. p. 29. Copiosissima *Sarzanæ* in omnibus locis herbidis et inter segetes BERTOL: l. c. p. 562. In *Sardin:* pascuis MORIS st: sard: I. p. 50.). Facie *Br: medicæ* simillima, sed differt ligula *elongata* acuta sæpe *lacera*, spiculis *deltoides* ac parum *minoribus*, glumula imos flosculos *superante*. Huc refert cl: BERTOL: l. c. p. 563. *Br: virentem* ALL: n. 2216. quæ differre videtur spicula *ovato-rotundata* (ex qua magis accederet ad *mediam*) et panicula basi folio superiore *involuta*; sed isti characteres facile evanescent. Exemplar meum de *Br: virente* ex *Nicæa* a sollertissimo RE donatum exhibet plantam cæspitosam plures culmos referentem; in inferioribus paniculæ sunt folio supremo basi *involutæ*, in superioribus omnino *liberæ*; in spiculis autem nullum discrimen observare mihi datum fuit; aliæ sunt sub-ovatae angulis obsoletis vel nullis, aliæ evidentius triangulares uti occurrit etiam in *Br: minore*; ideo BERTOLONII opinionem amplector.

XVII. Poa Lin: gen: ed: Schreb: n. 114. excl: paucis stirpib: = Spr: syst: n. 341. = Lam: ill: t. 45. = *Poa*, *Festuca*, *Sclerocloa*, *Sphenopi*, *Arundinis*, *Brizæ*, *Eragrostidis*, *Megastachyæ*, *Cynosuri*, *Uniolæ*, *Dactylidis* et *Bromi* spec: nonnullæ quorund:

» Glumula 2-valvis 3-multi-flora flosculos compresso-turgidulos muticos sub-æquans. Flosculi basi liberi aut villo floccoso connexi. Perigon: 2-valve  
» valvulis inæqualibus sæpe margine scariosis. Squa-

» *mula* 2-fida aut *squamulæ* 2. approximatae. *Ca-*  
» *ryops*: libera intra perigonium persistens. »

*Obs*: Genus numerosissimum, hinc pro variis stirpibus valde obscurum nec satis apte determinatum, proinde varie ab Auctoribus in nova genera vel in sectiones divisum, exhibens inflorescentiam vere paniculatam vel racemoso-spicatam, glumulam 3- ad 40-floram, ex quibus cl: SPR: sectiones suas statuere sategit; fateor hasce omnino artificiales esse et quandoque affinitates disrumpere; at qui naturalem prorsus hujusce generis divisionem proponat, magnus hic erit Apollo; adde, perplures stirpes esse valde polymorphas præsertim in spicularum structura, ex qua generatim optimi desumuntur characteres. Sistit autem 140. circiter stirpes herbaceas per orbem sparsas, multas europæas, inter quas 20. italicas modo enumerat et more suo concinne describit cl: BERTOL:

### \* Panicula vera.

#### 1. *Glumula* 3-flora.

\* 1. *P. trivialis* = L. sp: 99. non All: = Spr: syst: I. 337. Bertol: fl: ital: I. p. 538. excl: *P. cilianensi* All: = Host: gram: austr: II. p. 45. t. 62. *P. pratensis* All: n. 2206. non L. (*Eur*: , *Asia* , *Amer*: bor: *Pedem*: ubique in pratis ALL: l. c. RE fl: segus: p. 12. et fl: tor: I. p. 66. BIROLI fl: acon: I. p. 27. *Sarzane* BERTOL: l. c. p. 539. *Sardin*: in pascuis montanis MORIS st: sard: II. p. 12.). Peren: Plus minus cæspitosa scabriuscula, folia linearia, li-



gulæ superiores elongatæ acutæ, panicula diffusa, spiculæ parvæ ovato-oblongæ, glumulæ valvæ inæquales flosculis sub-breviores majore 3-nervi minore 1-nervi, flosculi flocco paucō longoque complicati. Cl: ALL: hanc plantam commutavit cum *P. pratensi* ceu constat ex syn: SCHEUCHZ: et spicula 3-flora *pratensi* tributa, in qua certe 5-flora.

\* 2. *P. nemoralis* = L. sp: 102. = Spr: syst: I. 337. Bertol: fl: ital: I. p. 544. = Host: gram: austr: II. p. 51. t. 71. (*Eur: passim. Pedem: in sylvis umbrosis collinis et montanis frequens* ALL: n. 2198. RE fl: segus: p. 12. et fl: tor: I. p. 68. BIROLI fl: acon: I. p. 28. In monte *Gottro Liguriæ* orient: BERTOL: l. c. p. 545. In montanis *Sardin: med: MORIS* st: sard: I. p. 52.). Differt a priori præsertim ligula *obliterata*, panicula *stricta* nutante, glumulæ valvulis *sub-æqualibus* flosculos *sub-æquantibus* utraque 3-nervi, flocco in flosculis *obsoleto*. Variat multimode præsertim modis indicatis a R. et S. syst: II. p. 545. et seqq: et a GAUD: fl: helv: I. p. 237. et seqq: qui consulendi. *P. montana* ALL: n. 2199. quæ passim crescit in locis montanis ad oras sylvarum et in pascuis sterilibus, est certe *P. nemoralis* var: spiculis minoribus, glumula flosculis brevior; cave tamen hanc confundas cum *P. cæsia* GAUD: l. c. p. 249. valde diversa uti nuperrime probavit cl: BERTOL: l. c. p. 547. et constat ex specim: meis. Huc pertinet etiam *P. coarctata* DC. fl: fr: suppl: p. 273.

\* 3. *P. sudetica* = Haenk: sudet: p. 120. = Spr: syst: I. 337. Bertol: fl: ital: I. p. 550. = Host: gram: austr: III. p. 9. t. 13. *P. sylvatica* All: auct: p. 40.

et Vill: dauph: II. p. 128. t. 3. *P. sudetica*, *trinervata*, et *rubens* DC. (*Eur*: passim. *Pedem*: frequens in pascuis secus sylvas, locis subalpinis et montanis ALL: l. c. In *M. Cenisio* ad sylvarum limites RE fl: ægus: p. 12. Ex alpe *Valderiensi* dicta *le Stelle* retulit BERTERUS sec: BERTOL: l. c. p. 551. Habeo ex *Casellette* a BALBISIO). Peren: Elata compressiuscula repens, folia late linearia ligula brevi ore rotundata, panicula composita ramis diffusis multi- ac densi-floris, spiculæ parvæ oblongo-acutæ cum rudimento flosculi abortivi, flosculi liberi nudi, glumulæ valvulæ inæquales flosculo imo breviores majore 3-nervi minore 1-nervi, perigonii valvulæ sub-æquales exteriore exquisite 5-nervi.

\* 4. *P. laxa* = Haenk: sudet: p. 118. = Spr: syst: I. 337. Bertol: fl: ital: I. p. 532. = Host: gram: austr: III. p. 11. t. 15. *P. flexuosa* Sm: *P. elegans* DC. (In alpibus *Eur*: et *Amer*: *Pedem*: BALB: el: p. 7. sine loci indicatione. In pratis alpium *di Vegezzo* rara BIROLI fl: acon: I. p. 27. In illis etiam *Anzasca* postea reperit idem BIROLI mss:). Peren: Repens sub-cæspitosa, folia anguste linearia flexuosa breviter ligula oblongo-lanceolata sub-integra, panicula stricta laxiflora apice nutans, spiculæ grandiusculæ oblongo-ovatæ, flosculi basi crebre brevique floccosi, glumulæ valvulæ sub-æquales mucronulatæ totam locustam sub-æquantes.

## 2. *Glumula 4-5-flora.*

\* 5. *P. pratensis* = L. sp. 99. non All: = Spr: syst: I. 339. Bertol: fl: ital: I. p. 541. = Host: gram:

austr: II. p. 44. t. 61. *P. angustifolia* L. l. c. var: *P. trivialis* All: n. 2203. et fl: dan: t. 1444. non L. (*Eur*: fere tota. *Pedem*: nil vulgatius in pratis ALL: l. c. sub *P. triviali*. RE fl: segus: p. 12. et fl: tor: I. p. 66. n. 4. pro typo et n. 5. pro var: *angustifolia*. BIROLI fl: acon: I. p. 28. *Genuæ* in herbidis *all'Acqua-sola*, *Sarzanzæ* in pascuis collinis *di Sarzanello* BERTOL: l. c. p. 543. In *Sardin*: pratis typus et var: MORIS st: sard: I. p. 52.). Facie *P. triviali* n. 1., cum qua gregatim crescit, simillima, sed culmo foliisque *glabris*, ligulis *brevissimis truncatis*, spiculis *sub-5-floris*, ac demum utraque glumulæ valvula *3-nervi* diversa. *P. angustifoliam* L. solam var: *pratensis* adesse foliis radicalibus angustioribus spiculis sub-pubescentibus, modo omnes consentiunt. Variat etiam panicula strigosa foliis omnibus angustis glaucescentibus demum convolutis; hæc adinvenitur speciatim in ericetis *Ticini* sec: BIROLI mss: Cl: PIOTTAZ eandem observavit in locis aridis *Augustanis*.

\* 6. *P. annua* = L. sp: 99. = Spr: syst: I. 339. Bertol: fl: ital: I. p. 529. = Host: gram: austr: II. p. 46. t. 64. (*Eur*: passim. *Pedem*: vulgatissima ubique ALL: n. 2202. Frequens circa domos, vias et arva RE fl: segus: p. 12. et fl: tor: I. p. 66. BIROLI fl: acon: I. p. 28. *Genuæ*, *Sarzanzæ*, *Nicææ* etc. BERTOL: l. c. p. 531. *Sardin*: in pascuis et ad vias MORIS st: sard: I. p. 52.). Ann: Cæspitosa compressiuscula erectiuscula vel decumbens, folia breviuscula glabra ligulis omnibus oblongis, panicula composita ramis flexuosis diffusis superne tantum locustiferis, spiculæ ovatæ obtusæ compressæ, glumulæ valvulæ

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inæquales 3-nerves flosculis basi liberis breviores, perigonii valvulæ sub-æquales glabræ vel in var:  $\beta$  carina et ad nervos plus minus ciliatæ numquam tamen basi flocco implicatæ. Varietatem  $\beta$  quam non possideo habuit cl: BERTOL: ex summo jugo *Pizzo-marona* in alpibus *della Zeda* in valle *Intrasca* provinc: *Novariensis*: Huc quoque referunt cl: GAUD: et BERTOL: *P. supinam* SCHRAD: quam possideo ex PERRET sine loci indicatione, nec video differre nisi statura minori, panicula elegantiori: ex ejusdem lusibus GAUD: *variam* appellavit fl: helv: I. p. 247.

\* 7. *P. bulbosa* = L. sp: 102.  $\alpha$  et  $\gamma$  = Spr: syst: I. 339. Bertol: fl: ital: I. p. 534. = Host: gram: austr: II. p. 47. t. 65. f. 1. 6. Ic: taur: vol: 1. t. 79. (*Eur: passim. Pedem: ad vias et limites agrorum ubique frequens* ALL: n. 2205. In pascuis declivibus ubique RE fl: segus: p. 12. et fl: tor: I. p. 69. In pascuis *Ticini* vulgaris BIROLI fl: acon: I. p. 29. *Genuæ* in via *d'Oreggina*, *del Lagazzo* et a *Sestri di Ponente* in pratis prope litus maris, *Sarzanæ* in muro oppidi et *al Paradiso* BERTOL: l. c. p. 536. *Sardin: in pascuis frequens* MORIS st: sard: I. p. 52.). Peren: Cæspitosa glabra erecta basi inter vaginas foliorum bulbosa, folia angustato-linearia breviter culmea subnulla ligulis lanceolato-acutis, panicula brevis contracta erecto-patula, spiculæ parvæ ovatæ glumulæ valvæ sub-æquales flosculis flocco longissimo complicatis breviores. Variat locustis viviparis ex bulbillis foliaceis (*P. bulbosa*  $\beta$  L. l. c. Host: p. 48. t. 65. f. 7.), et bulbo radicali sursum surculifero sureulis apice bulbiferis culmiferisque (*P. bulbosa* KROCK: fl:

siles: I. p. 138. t. 25. sec: BERTOL:), prima varietas communis in *Pedem:*, altera mihi ignota.

\*? 8. *P. serotina* = W. en: I. p. 105. excl: syn: Schrad: = Spr: syst: I. 339. = *P. palustris* Vill: cat: Strasb: p. 71. t. 2. non L. *P. fertilis* Host: gram: austr: III. p. 10. t. 14. et Bertol: fl: ital: I. p. 540. (*Eur:*, *Amer:* bor: *Pedem:* in sylvis della Molla prope la Rocca di Broni NOCC: et BALB: fl: ticin: I. p. 43. In oryzetis di Confienza in Lomellina BERTOL: l. c. p. 541.). Valde affinis *P. pratensi* n. 5. sed differt præsertim spiculis acutioribus, flosculis obsolete nervosis flocco brevi complicatis, ligulis longioribus erosolaceris. Fide Auctorum fl: ticin: ac BERTOL: refero hanc plantam inter pedemontanas; ego numquam inveni; eam equidem enumerat cl: BALB: in el: p. 7. sub *P. serotina*, sed sine loci indicatione uti in specim: mihi ab ipso donato; etiam BELLARD: app: p. 8. *P. palustrem* citat quam legit in stagno prope *Sturam taurinensem*; sed ibi nunc frustra perquiritur, etsi abundat *Leerzia oryzoides* cum qua forsân cl: Auctor plantam suam commutavit.

9. *P. distans* = L. mant: I. 32. Bertol: fl: ital: I. 515. *P. distans* et *maritima* Spr: syst: I. 339. (*Eur:* et *Amer:* bor: locis salis et maritimis. *Sardin:* in pascuis maritimis MORIS st: sard: I. p. 52.). Peren: Cæspitosa, folia angustissime linearia sub-convoluta ligulis brevibus obtusis vel acutis integris vel erosis, panicula laxa ramis patulis vel deflexis magnitudine varia, flosculis lanceolatis basi liberis. *P. maritima* Huds: statura generatim majore, non esse nisi lusum *P. distantis*, censet BERTOL: l. c. p. 517. Specim:

mea de utraque et de *P. salina* POLLICH: ne vix quidem divergunt. Differre tamen videtur *P. festucaeformis* Host: quam hic quoque conjunxit BERTOL:

\* 10. *P. cilianensis* = All: n. 2207. t. 91. f. 2. = Spr: syst: I. 339. = *P. trivialis* Bertol: fl: ital: I. p. 538. (*Pedem:* in agro *Ciliani* ALL: l. c. c. descr: ubi tamen hodie non amplius invenitur. Rara secus *Cerundam* prope *Venariam*, *Druent* ac *Taurinum* RE fl: tor: I. p. 68. Ex valle *Augustæ Prætorix* retulit PIOTTAZ RE app: I. p. 10.). Stirps valde affinis *P. triviali* n. 1. cum qua illam demum junxit cl: BERTOL: l. c., sed sensu meo evidenter differt statura undique *majori*, culmo profunde *sulcato*, folio supremo panicula *sub-longiore*, glumula sæpius 5-*flora*. Ico ALL:, etsi rudis, plantam luxuriantem non exhibet sed revera uti est in specim: meis, in quibus insuper articuli inferiores culmorum *radicati* adparent, quod numquam vidi in *P. triviali*. Differentia staturæ inter hasce duas stirpes magni habenda quum constans sit et in iisdem fere solo et altitudine crescant, etsi *cilianensis* valde rarius occurrat.

### 3. *Glumula* 6-8-*flora*.

\* 11. *P. aquatica* = L. sp: 98. = Spr: syst: I. 341. Bertol: fl: ital: I. p. 513 = Host: gram: austr: II. p. 44. t. 60. *Glyceria* Smith: *Hydrochoa* Linck: (*Eur:* aquosis. *Pedem:* secus fossas aquarum et stagnorum in agro *Vercellensi* et *Canapiciensi* ALL: n. 2213. Nascitur etiam secus lacum *di Caselette* ALL: auct: n. 41. RE fl: segus: p. 12. et fl: tor: I. p. 65.



In pascuis oryzarum BIROLI fl: acon: I. p. 27. In *Lo-mellina a Gravellona* BERTOL: l. c. p. 514.). Peren: Repens valde elata sub-anceps firma, folia late linearia basi maculata longa striata scabra et fere ensiformia ligulis brevibus integris rotundato-cuspidatis, panicula amplissima æqualis diffusa ramosissima valde multiflora, spiculæ lineares erectæ compresso-turgidulæ, flosculi liberi valvula exteriori 7-nervi.

\* 12. *P. pilosa* = L. sp: 100. = Spr: syst: I. 341. Bertol: fl: ital: I. p. 552. = Host: gram: austr: II. p. 49. t. 68. *P. Eragrostis* All: n. 2214. non L. *Eragrostis pilosa* P. de Beauv., R. et S. (*Eur: med: et austr: Pedem: locis arenosis et secus flumina et torrentes vulgaris, etiam inter segetes sed rarius* ALL: l. c. Ad viam *Stupinixii* alibique BALB: misc: alt: p. 7. In pascuis RE fl: segus: p. 12. In locis udis minime rara et speciatim ad viam *Stupinixii* et in arvis *di Druent* RE fl: tor: I. p. 67. In pascuis arenosis etiam circa urbem *Novariæ* frequens BIROLI fl: acon: I. p. 28. sub *P. Eragrostide*. *Sarzanæ* in fossis viæ *Romanæ* et in arenis *Macræ*, in humentibus ad *Verbanum* prope *Intra* BERTOL: l. c. p. 553.). In hac et sequenti axis communis flosculorum persistens, perigonii valva interna in axi diutius fixa, ceteræ locustæ partes deciduæ, quæ omnia distinguunt *Eragrostidem* a *Poa* juxta P., DE BEAUV: aliorumque opinionem. Planta ann: cæspitosa sub-decumbens, folia anguste linearia vaginis ore albo-barbatis, panicula laxiflora inferne verticillata ramis primariis exortu pilosis, spiculæ lineares compressæ.

\* 13. *P. Eragrostis* = L. sp: 100. excl: syn: = Spr: syst: I. 345. Bertol: fl: ital: I. p. 554. = Host: gram: austr: II. p. 50. f. 69. *P. megastachya* Kock: gram: 151. *Briza Eragrostis* All: n. 2219. ex L. Ic: taur: vol. 13. t. 10. f. 1. *Megastachya Eragrostis*. *Eragrostis poæoides*, *poæformis*, *megastachya* quorund: (*Eur*: med: et austr: *Pedem*: secus agros atque in arvis præsertim quibus satum est *Mays* frequentissime nascitur ALL: l. c. BALBIS fl: taurin: p. 18. BIROLI fl: acon: I. p. 29. omnes sub *Briza Eragrostis*. RE fl: tor: I. p. 67. sub *P. megastachya*. Obvia in cultis et ruderalis totius *Italicæ* BERTOL: l. c. p. 556. *Sardin*: ad margines agrorum MORIS st: sard: I. p. 52.). Vix differt a priori statura *majori*, spiculis *turgidulis* strictis 20-floris. Ceterum planta habitum in locustis tam proteiformem exhibet, ne quid certi proponere audeam circa ejus identitatem cum *Briza Eragrostis* L. Lectorem amando ad observationem cl: BERTOL: l. c. p. 557.

\* 14. *P. compressa* = L. sp: 101. = Spr: syst: I. 341. Bertol: fl: ital: I. p. 548. = Host: gram: austr: II. p. 51. t. 70. (*Eur*: passim. *Pedem*: abunde in arvis ALL: n. 2210. RE fl: segus: p. 12. et fl: tor: I. p. 67. Ad *Ticinum* et ericetis *Burgimani* BIROLI fl: acon: I. p. 28. *Sarzane* in campis *di Nava* intersata et in alveo *Macræ* sub *Trebbiano*. *Sardin*: in pascuis montanis *Fonni* MORIS st: sard: II. p. 12.). Peren: Repens culmis decumbentibus sæpius radican-  
tibus valde compressis, folia breviter vaginis compressis ligulis brevissimis truncatis, panicula oblonga

sub-secunda ramis brevibus sub-flexuosis dense et multi-locustiferis, spiculæ ovato-lanceolatæ compressæ, flosculi basi nudi vel parum floccosi.

\* 15. *P. alpina* = L. sp. 99. = Spr: syst: I. 341. excl: *P. cenisia* All: Bertol: fl: ital: I. p. 527. = Host: gram: austr: II. p. 49. t. 67. f. 1. 7. Ic: taur: vol. 13. t. 22. f. 2. (*Eur: montib: Pedem: ubique in pratis et pascuis alpium* ALL: n. 2209. RE fl: segus: p. 12. BIROLI fl: acon: I. p. 27.). Peren: Sub-cæspitosa glabra statura varia, folia linearia breviuscula plus minus angusta mucronata ligulis infimis truncatis brevissimis superioribus lanceolatis, panícula abbreviata diffusa ovato-rotundata ramis sæpius geminatis multi-locustiferis, spiculæ ovato-acutæ compresso-distichæ eleganter variegatæ, flosculi liberi. Variat multimode, unde recentiores Auctores ad hanc referunt *P. Molinerii* BALB: addit: p. 85. et misc: bot: I. p. 12. t. 5. f. 1. non Schleich: quæ crescit speciatim locis saxosis et siccis prope *Tendam*; *P. badensem* W. sp: I. 392. (eadem ac *P. collina* Host: l. c. p. 48. t. 66. et *brevifolia* DC. fl: fr: suppl: p. 274.) a cl: BIROL: repertam in summis alpibus *di Varzo Semplonium* versus; *P. cineream* VILL: dauph: II. p. 126. eadem ac *P. variegata* LAM: sec: DC. fl: fr: n. 1610. sub *P. angustifolia* L.; *P. cenisiam* SCHRÆB: fl: germ: I. p. 422. a *cenisia* ALL: diversam; *P. concinnam* GAUD: fl: helv: I. p. 248. non R. BR.; eadem ac *P. Molinerii* SCHLEICH: non BALB.; inventam a D. TAVRE in arenosis *Quarti Augustani* non longe a via publica sec: CAPELLI cat: h. Taurin: Insigniorem var: habemus in *P. vivipara* W. en: 103. et BALB: el: p. 7. (*P. alpina*  $\beta$  L. sp:



99., fl: dan: t. 807.), in qua spiculæ valvæ omnes abeunt in bulbillos foliaceos; hæc crescit ubertim in *M. Cenisio*, nec non in *M. Semplonio* monente BERTOL: l. c. p. 528. Cave ne illam confundas cum alia *vivipera* ad *P. bulbosam* pertinente de qua supra n. 7.

\* 16. *P. cenisia* = All: auct: p. 40. = Bertol: fl: ital: I. p. 533. = *P. alpina* var: Spr: syst: I. 341. *P. stolonifera* Bellard: app: p. 215. t. 3. *P. distichophylla* Gaud: fl: helv: I. p. 250? (*Pedem*: secus torrentes sabulosos exsiccatos in *M. Cenisio* ALL: l. c. RE fl: segus: p. 12. In montibus *Limonii* et vallis *Pisii* BELLARD: l. c.). Differt a priori surculis *distichophyllis*, ligulis omnibus *obtusis laceris*, panicula *strictiore*, spiculis paulo *majoribus* et *acutioribus*, ac præsertim flosculis basi *valde floccosis*. *P. distichophyllam* GAUD: quam hic reluctantem Auctorem conjungit BERTOL:, non possideo; observo tantum, nomen improprium esse, eodem enim gaudet antiquior stirps R. BR: prodr: ed: 2. p. 182. n. 20.

\* 17. *P. rigida* = L. sp: 101. = Spr: syst: I. 341. Bertol: fl: ital: I. p. 522. = Host: gram: austr: II. p. 53. t. 74. Sub *Sclerochloa* Link: Sub *Megastachya* R. et S. *Triticum maritimum* Wulf: in Jacq: coll: III: p. 34. (*Eur*: med: et austr: *Pedem*: abunde locis aridis ad limites agrorum et secus vias in agro *Nicæensi*, *Astensi*, *Liguria* ac etiam *Taurinensi*:, similibus locis præsertim aridis declivibus ALL: n. 2212. In pascuis sterilibus calidisque RE fl: segus: p. 12. *Taurini* ad portam novam prope *la Consegna* et ad scalam Ecclesiæ *di Superga* RE fl: tor: I. p. 67. Secus

*Verbanum* in aridis BIROLI fl: acon: I. p. 28. *Sarzane* et *Genuæ* in muro oppidi BERTOL: l. c. p. 524. *Sardin:* secus vias MORIS st: sard: I. p. 52.). Ann: Sub-cæspitosa erectiuscula, folia anguste linearia scabriuscula ligulis brevibus truncatis eroso-laceris bifidisve, panicula valde rigida sæpius lanceolata, ramis alternis vel distichis gradatim decrescentibus multilocustiferis, spiculæ angustissimæ rigidæ innuptæ terehti-subulatæ, flosculi persistentes basi liberi. Planta tota læte virescens sub-glauescens. Variat panicula prorsus *applanata* (*P. rigida*  $\beta$  SAVI Prot: etr: I. p. 62., *Triticum hemipoa* TENORI syll: fl: neap: p. 56.); var: hæc præfert loca maritima illamque legit BERTOL: in littore *Lunensi alla Marinella* et in *Liguria occidua a Sestri di Ponente*; eandem habeo a BERTERO lectam ad muros circa *Cortemilia*.

\*\*\* Panicula spicata.

1. *Glumula* 3-8-flora.

\* 18. *P. dura* = Scop: carn: ed: 2. tom: I. p. 70. = Spr: syst: I. 346. Bertol: fl: ital: I. p. 525. = Host: gram: austr: II. p. 53. t. 73. Sub *Cynosuro* L. sp: 101. Sub *Schlerochloa* P. de Beauv., R. et S., Gaud: (*Eur: med: Pedem: secus arva Cherasci*, in agro *Taurinens: ALL: n. 2211*. Secus viam prope *Segus: extra Porte de Lard* RE fl: segus: p. 12. sub *Cynosuro*. *Stupinixii ante la fabbrica delle Cascine*, in locis conculcatis prope *Valentinum* et prope *l'Ergastolo*, prope pontem *Sturæ* non procul a *Venaria*

RE fl: tor: I. p. 71. sub eodem. In ericetis supra *Ticinum* uti ad *Romentino*, ad vias frequens BIROLI fl: acon: I. p. 30. sub eodem. Ex prov: *Albensi* retulit BERTERUS ). Ann: Pro genere humillima cæspitosa glabra, folia linearia rigidiuscula culmos generatim superantia, ligula angusta oblonga, spica brevis coarctata compressiuscula ramis pauci-locustiferis, spiculæ alternæ secundæ disticho-compressæ 3-5-floræ, flosculi persistentes liberi.

*Species magis dubiæ.*

19. *P. glacialis* = Pall: Ita in scheda specim: ex hb: BELLARDI sine alia indicatione. Herba semi-pedalis glabra, folia anguste linearia sub-convoluta ligula brevissima truncata, culmus erectus angustissimus striatus, panicula laxa ramis paucis distantibus filiformibus patentibus flexuosis pauci-locustiferis, spiculæ secus ramos alternæ remotiusculæ minimæ brevissimæ pedunculatæ, glumulæ valvulæ sub-æquales 2-3-floræ flosculis basi liberis breviores. Radix deest in specim: = 20. *P. dalavarica*. Ita in scheda specim: ex hb: BIROLI, sed non citata in ejus catalogo. Herba dodrantalis tota glabra radice valde fibrosa tenui ramulosa subinde longa nec repente, foliis numerosis latiusculis linearibus planis levissime striatis mollibus valde elongatis superioribus parum latioribus paniculam superantibus ligula sub-nulla, panicula erecta ovata pollicaris cito florifera a folio supremo ramis alternis erectiusculis brevibus compressis multi-locustiferis spiculis linearibus creberrimis sessilibus secus ramos



et ramulos, glumulæ valvulis sub-æqualibus 2-3-floris flosculos basi liberos sub-æquantibus. = Quid *P. subnuda* ALL: n. 2200? Non invenitur in ejus hb:

XVIII. *BROMUS* Lin: gen: ed: Schreb: n. 120. = Spr: syst: n. 353. = Lam: ill: t. 46. = *Festucæ* et *Schenodori* spec: nonnullæ quorund:

» *Glumula* 2-valvis multiflora, valvulis sub-inæqualibus, flosculis distiche imbricatis brevioribus. *Perigon*: 2-valve, valvis inæqualibus, exteriori apice sæpius 2-fida constanter infra apicem aristata (*setigera* sec: GAUD:), interiore ciliata. *Stam*: 3. rarius 2. *Stigmata* plumosa. *Squamula* solitaria emarginata vel 2. *Caryops*: oblonga apice villosa perigonio adhærens. »

*Obs*: Genus ex spicularum structura et dispositione sat facile distinguendum, constans 50. circiter stirpibus ab Auctoribus varie divisis, inter quas nonnullæ facie ad *Secalem*, aliæ ad *Festucam* magis accedentes, aliæ demum habitum proprium retinentes, unde *Secalinæ*, *Festucaceæ* vel *Genuinæ* dictæ. Plantæ annuæ, biennes vel perennes per orbem sparsæ, multæ europææ (media circiter pars), foliis linearibus, inflorescentia paniculata aut racemosa.

#### 1. *Secalini*

(Bertol: fl: ital: I. p. 654.).

\* 1. *Br: secalinus* = L. sp: 112. = Spr: syst: I. 357. = Host: gram: austr: I. p. 10. t. 12. (*Eur*; *Asia* med: *Pedem*: in pratis frequens præsertim col-

lium et montium ALL: n. 2238. Inter segetes collium occurrit, glumis aristatis in campis sabulosis abundat BIROLI fl: acon: I. p. 32. In agro *Taurinens*: desideratur. *Sarzanæ* in litore *alla Marinella*; ex arvis *Ticinensib*: ubi occurrit inter sata BERTOL: l. c. p. 655.). Ann: Elatiusculus, folia pilosa ligula brevissima eroso-truncata, panicula elongata laxa apice nutans ramis apice sub-pauci-locustiferis, spiculæ ovato-oblongæ compresso-turgidæ grandiusculæ sub-8-floræ, flosculi arista recta longiores vel æquales. Variat panicula ramis spiculisque molliter villosis, arista flosculis longiore (*Br: velutinus* SCHRAD: , *multiflorus* SMITH: , *grossus* POLLIN: , *Br: squarrosi* varr: SPR:). Huc pertinent plantæ ALL: *Br: grossus* POLLIN: invenitur speciatim in collibus cispadanis *di Broni*.

\* 2. *Br: racemosus* = Bertol: fl: ital: I. 657. = Engl: bot: t. 1079. = *Br: racemosus* et *hordeaceus* L. sp: *Br: racemosus* et *commutatus* Spr: syst: I. 359. *Br: pratensis* Re non Spr: *Br: simplex* Gaud: agr: non fl: helv: (*Eur: passim. Pedem: frequens in pratis Taurinens: atque ad fossas secus viam inter Taurinum et Venariam* RE app: p. 11. et fl: tor: I. p. 78. Prope *Sarzanam* in pratis ad ostia *Macræ* BERTOL: l. c.). Differt a priori, cui valde affinis et cum eo forsitan confusus a cl: ALL: , radice bienni, panicula strictiore erecto-patula, flosculis arista recta brevioribus.

\* 3. *Br: arvensis* = L. sp: 113. = Spr: syst: I. 357. = Host: gram: austr: I. p. 12. t. 14. Ic: taur: vol. 1. t. 76. (*Eur: , Asia, Amer: Pedem: ad limites agrorum et in pratis non irriguis* ALL: n. 2232. RE

fl. tor: I. p. 79. In arvis et campis abundat, varians spicis aristatis et muticis BIROLI fl: acon: I. p. 33.). Ann: Proximus etiam *Br: secalino* n. 1., sed spiculis longioribus lanceolatis *sub-10-floris*, flosculis evidentius *imbricatis*, arista flosculos generatim *sub-æquante* distinctus.

\* 4. *Br: squarrosus* = L. sp: 112. = Spr: syst. I. 357. Bertol: fl: ital: I. p. 660. = Host: gram: austr: I. p. 11. t. 13. Ic: taur: vol. 1. t. 71. (*Eur., Asia. Pedem:* in pratis et herbidis collium ALL: n. 2230. Passim in pratis aridis declivibus RE fl: segus: p. 13. et fl: tor: I. p. 79. BIROLI fl: acon: I. p. 33. *Nicæa* prope *il Lazaret* et in litore maris DC. fl: fr: suppl: p. 276. Ipse legi cum BERTERO in *M. Cenisio. Sardin:* in pascuis et in arvis MORIS st: sard: I. p. 50.). Distinguitur a præcedentibus præsertim inflorescentia potius *racemosa* quam *paniculata*, racemo secundo nutante, spiculis grandioribus ovato-oblongis 8-20-floris nudis scabris vel pilosis, aristis longioribus recurvato-intortis seu ad angulum fere rectum divaricatis; spiculas *glaberrimas* dicit GAUD: fl: helv: I. p. 320.; in specim: meis sæpius *scabras* vel *pilosas* observavi.

\* 5. *Br: mollis* = L. sp: 112. = Spr: syst: I. 359. Bertol: fl: ital: I. p. 662. = Host: gram: austr: I. p. 16. t. 19. Ic: taur: vol. 1. t. 70. Vern: *Biava servaja* (*Eur:* passim. *Pedem:* ad vias et ad oras pratorum ALL: n. 2229. In pratis ubique RE fl: segus: p. 13. et fl: tor: I. p. 76. In pratis ubi etiam spiculis longe pedicellatis occurrit BIROLI fl: acon: I. p. 32. *Sarzanæ* et *Genuæ all'Acquasola* et a *Sestri di*



*Ponente* in litore BERTOL: l. c. *Sardin:* in collinis montanisque MORIS st: sard: I. p. 50.). Bien: Undique molliter villosus, racemus erectus ramis strictis multilocustiferis, spiculæ ovato-lanceolatæ compresso-turgidæ 8-floræ hirsutæ, perigonii valvula exterior apice 2-fida, arista recta leniter flexuosa. Huc videtur spectare *Br: intermedius* Guss: fl: sic: pr: I. p. 114. et fl: sic: I. t. 35., idem ac *Br: erectus* MORIS st: sard: I. p. 50. non HUDS: et *alopecuroides* ejusdem Auctoris II. p. 11. sec: BERTOL: fl: ital: I. p. 663., differt enim tantum spiculis paullo minoribus; longitudo aristarum ad valvulam perigonii exteriorem pauci facienda in hac specie, in qua varie ludit.

6. *Br: confertus* = M. B. fl: taur: caucas: I. p. 71. (*Caucas: Sardin:* in pascuis aridis MORIS st: sard: I. p. 50.). Habitus præcedentis, sed minus villosus, spiculæ scabræ nec hirsutæ, aristæ divaricatæ. Inter plantas italicas hanc stirpem non refert BERTOL:; specim: meum ex *Caucaso*. = 7. *Br: scoparius* = L. sp: 114. (*Hispan:*, *Græc:*, *Ital:* merid: *Sardin:* inter segetes MORIS st: sard: II. p. 11.). Bien: Valde cæspitosus sub-pilosus, racemus breviusculus congestus striatus densiflorus, spiculæ lanceolatæ acutiusculæ, aristæ recurvato-patentes.

## 2. *Festucei*

(Bertol: fl: ital: I. p. 667.).

\*? 8. *Br: lanuginosus* = Poir: dict: suppl: I. p. 703. = *Br: lanceolatus* Roth: var: sec: Spr: syst: I. 679. *Br: divaricatus*  $\beta$  Loisl: in journ: bot: II. p.

214. = Ic: ? (*Gallia merid: In sabulosis litoris Nicæens: DC. fl: fr: suppl: p. 276. In aridis apricis Sardin: med: MORIS st: sard: I. p. 50.*). Fide cl: DC. refero hanc stirpem, quam non possideo, inter nicæenses; immo cl: BERTOL: nec illam enumerat inter synon: ; describit quidem *Br: lanceolatum* ROTH: cui tribuit syn: *Br: macrostachys* Guss: *lanuginoso* valde affinem sec: R. et S. syst: II. p. 639., sed neque *Nicææ* neque *Sardin:* incolam illum dicit.

\* 9. *Br: giganteus* = L. sp: 114. = Spr: syst: I. 359. Bertol: fl: ital: I. p. 667. = Host: gram: austr: I. p. 6. t. 6. *Festuca gigantea et triflora* Engl: bot: t. 1820. et 1918. (*Eur: passim. Pedem: secus rivulos et etiam ad oras pratorum frequens locis umbrosis saxosis montanis et collinis ALL: auct: p. 41. pro correctione loci ad fl: n. 2223. RE fl: segus: p. 13. Præcipue secus rivulos della Molinetta RE fl: tor: I. p. 79. Secus aquæductus ad vias BIROLI fl: acon: I. p. 33.*). Peren: Valde elatus glabriusculus, folia latiuscula superne scabra basi auriculata, panicula laxa elongata nutans ramis flexuosis sæpe geminis subsimplicibus multi-locustiferis, spiculæ graciles oblongo-compressæ scabræ sub-7-floræ, aristæ capillares flosculis longiores.

\* 10. *Br: asper* = L. fl: suppl: p. 111. = Spr: syst: I. 359. Bertol: fl: ital: I. p. 669. = Host: gram: austr: I. p. 6. t. 7. *Br: ramosus* All: n. 2235. ex L. syst: non mant: (*Eur: passim. Pedem: in sylvis collium Taurinens: ALL: l. c. In agro Segusiano circa sylvas RE fl: segus: p. 13. Secus rivulos eundo alla Maddalena RE fl: tor: I. p. 77. Sarzanæ in umbrosis*

secus canales ad radices montis *Caprione*, ex sylvaticis thermarum *Valdesiarum* BERTOL: l. c. p. 670.). A priori, cui proximus, differt præsertim vaginis foliorum *hirsutissimis*, panicula *sub-secunda*, flosculis *remotioribus pubescentibus*, aristis flosculo *brevioribus*. Huc pertinere videtur *Br: hirsutissimus* CYRILL: quem habeo ex TENOR: *Br: ramosus* L. mant: spectat ad *Festucam phænicioidem*.

\* 11. *Br: inermis* = L. syst: veg: ed: 13. p. 100. = Spr: syst: I. 359. Bertol: fl: ital: I. p. 670. = Host: gram: austr: I. p. 8. t. 9. Sub *Schenodoro* R. et S. (*Eur: passim. Pedem: circa Sospello et circa Ormea* ALL: n. 2231.). A præcedentibus statim dignoscitur *glabritie* in omnibus fere partibus, panicula *erecta* ramis *sub-verticillatis*, spiculis *teretiusculis*, et speciatim perigonii valvula exteriori *mutica* vel *brevissime* aristata.

\* 12. *Br: erectus* = Huds: angl: p. 49. = Spr: syst: I. 359. Bertol: fl: ital: I. p. 671. = Fl: dan: t. 1383. *Br: agrestis* All. n. 2224. Host: gram: austr: I. p. 9. t. 10. *Br: perennis* Vill: dauph: II. p. 122. (*Eur: passim. Pedem: secus agros et in pascuis sterilibus*, circa urbem *Vercellarium* copiose ALL: l. c. In pascuis montanis *di Chianoc* et supra *Mompantero* RE fl: segus: p. 13 sub *Br: perenni*. Obviam venit in collibus *Taurinensib: editioribus* ad sylvarum margines et vulgaris admodum est in *M. Musinè* RE fl: tor: I. p. 78. Copiosissimus *Genuæ* in omnibus locis herbosis, in collibus *al Lagazzo* in monte *Fasce*, *Sarzane* in monte *Caprione* et *Nuda*, *Clavaro* in *Liguria* orient: ex monte *S. Jacobi* et ex viciniis



Sanctuarii di Montallegro, ex valle di Andora in Liguria occidua, ex montibus comit: Nicæens: a Roccabiliera BERTOL: l. c. p. 672. Sardin: in sylvis monte S. Pula MORIS st: sard: l. p. 50., sed planta sardoa, quam non habeo, traditur a BERTOL: ad *Br: mollem* n. 5.). Peren: Folia radicalia angustissime linearia ciliato-pilosa culmea latiora sub-nuda, panicula erecta laxiflora ramis inferioribus fasciculatis inæqualibus, spiculæ lineari-lanceolatæ compressæ sub-8-floræ, aristæ rectæ flosculis breviores; variat modis indicatis a cl: GAUD: fl: helv: l. p. 310. Easdem plantas possideo sub nominibus *Br: erecti*, *agrestis*, *laxi*, et *longiflori*, in quibus differentias essentielles non video.

### 3. *Genuini*

(Bertol: fl: ital: l. p. 674.).

\* 13. *Br: sterilis* = L. sp: 113. = Spr: syst: l. 357. Bertol: fl: ital: l. p. 674. = Host: gram: austr: l. p. 13. t. 16. Ic: taur: vol. 1. t. 73. (*Eur: passim. Pedem: ad vias et ad muros ubique ALL: n. 2227. RE fl: segus: p. 13. et fl: tor: l. p. 77. Circa urbem Novariæ frequens BIROLI fl: acon: l. p. 33. In prov: Aconiens: etiam in cultis præsertim in cerealibus crescit BIROLI mss: Ad vias Sardin: med: MORIS st: sard: l. p. 50.*). Ann: Puberulus, panicula simpliciuscula in anthesi diffuse nutans ramis elongatis inferioribus semi-verticillatis superioribus sub-solitariis, spiculæ lineari-lanceolatæ demum compressæ pendulæ

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7-10-floræ, perigonii valvula exterior exquisite 7-nervis scabra, arista erecta flosculis valde longior.

\* 14. *Br: madritensis* = L. sp: 114. ? = Spr: syst: I. 358. = Host: gram: austr: I. p. 14. t. 17. Barrel: ic: 76. f. 1. *Br: scaberrimus* Bertol: fl: ital: I. p. 676. ex Tenor: (*Ital: , Anglia, Gallia, Hispan: , Afr: bor: ex SPR: Pedem: locis siccis circa Castron in comit: Nicœens: ALL: n. 2236. In collibus cispadanis di Broni NOCC: et BALB: fl: ticin: I. p. 57. Genuæ BERTOL: l. c. p. 677. Sardin: in collinis montanisque MORIS st: sard: I. p. 50.*). Stirps Linnæana valde dubia; specim: mea sunt omnia ex plantis enatis a seminibus *Nicæa* lectis et communicatis a cl: BALBIS: , vera spontanea non possideo. Cl: BERTOL: duas species admittit valde proximas, quibus *Br: madritensis* synon: tribuit, excl: tamen stirpe L., sc: *Br: scaberrimus* TENOR: quem asserit esse *madritensem* ALL:, et *maximus* PRESL: idem ac *madritensis* GUSS: quem observavit *Sarzanæ*. Plantæ meæ adamussim non quadrant cum omnibus characteribus a præstantissimo italico nostro Botanico exaratis; sed hoc parum præstat, utraque enim valde variat et vix recedit a *Br: sterili* forsân earum typo. Phrasis SPR: majorem lucem non refert, nam in ipsa omnes fere characteres particula *sub* præcedit! In tot rerum adjunctis nil certi asserere audeo circa plantam pedemontanam ceterum raram. Secus SPR: huc pertinent *Br: diandrus* SM:, *Br: gynandrus* ROTH:, *Br: jubatus* TENOR:, *Br: maximus* DESF:, *Br: hordeiformis* LAM: SEC: BERTOL: ad *Br: scaberrimum* spectant *Br: sterilis* ejusdem Auctoris am: ital:, *Br: madritensis* ALL:, *Br:*

*rubens* Host: non L., *Br: rigidus* Roth: ; et ad *Br: maximum* amendantur *Br: sterilis* Sav: ac *Br: madritensis* Guss:

\* 15. *Br: tectorum* = L. sp: 114. = Spr: syst: I. 357. Bertol: fl: ital: I. p. 680. = Host: gram: austr: I. p. 13. t. 15. (*Eur: Pedem: ubique locis aridis frequens* ALL: n. 2226. Ræ fl: segus: p. 13. et fl: tor: I. p. 77. In pascuis *Ticini* et collium *BIROLI* fl: acon: I. p. 33. *Sardin: in ruderatis* MORIS st: sard: I. p. 50.). Ann: Molliter pubescens, panicula ampliuscula sub-secunda apice ramisque nutans, spiculæ lineares pendulæ sub-6-floræ, arista perigonii valvulam exteriorē sub-æquans.

\* 16. *Br: rubens* = L. sp: 114. non Host: = Spr: syst: I. 358. excl: syn: All: Bertol: fl: ital: I. p. 682. = Sibth: fl: græc: I. p. 66. t. 83. Cav: ic: I. p. 34. t. 45. f. 2. (*Ital: , Gallia austr: , Hispan: , Græcia. In agro Nicæens: ALL: n. 2228. Genuæ in muro oppidi ad Feritorem* BERTOL: l. c. In arvis *Sardin: MORIS st: sard: II. p. 11. ). Priori affinis, sed differt præsertim panicula erecta ovata densa fasciculata viridi-rubente, spiculis pariter erectis valde approximatis. Br: ligusticus* ALL: quem hic jungit SPR: pertinet ad *Festucam ligusticam* BERTOL:

*Bromi magis dubii vel novi.*

\* 17. *Br: Bertolæ.* « *Br: cæspitosus* undique vil-  
» losus ; foliis late linearibus acuminatis culmisque  
» striatis, summo racemo sub-longiore ; racemo ere-  
» cto firmo simplicissimo, ramis strictis brevibus 1-2-



» locustiferis ; spiculis ovato-oblongis compresso-tur-  
 » gidis ; perigonii exterioris valvula 5-nervi ad apicem  
 » brevi-aristata ; arista recta firmula. » NOB: (*Pedem:*  
 in pascuis declivibus *della Molinetta* reperit el: BER-  
 TOLA). Stirps obscura , forsan alterius generis præ-  
 sertim ob aristæ insertionem ad apicem et non infra.

18. « *Br: alter affinis ex Donat: Ægypt:* » Ita in  
 scheda specim: ex hb: BIROLI. Planta vix palmaris gla-  
 briuscula sub-simplex erecta, folia late linearia striata  
 summo racemum sub-æquante , racemus spicæformis  
 apice nutans ramis pauci-locustiferis, spiculæ linea-  
 res valde compressæ elongatæ, arista recta flosculis  
 duplo longior. = 19. *Br: coarctatus* = II. Erfurt:  
 Ita in scheda specim: ex hb: BIROLI (Patria?). Planta  
 spithamæa undique villosissima, folia lanceolata bre-  
 viuscula, inflorescentia in veram spicam simplicissi-  
 mam elongatam erectam , spiculæ rachide adpressæ  
 ovato-lanceolatæ compressiusculæ 1-2-locustiferæ ,  
 arista mollis brevissima. An alterius generis ? = 20.  
*Br: parviflorus* = Desf: h. Paris: ed: 3. p. 19. c. descr:  
 p. 387. (Patria?). = 21. *Br: Berterianus* = Nob:  
*Br:.....?* Berter: in sched: « *Br: erectus elatus, fo-*  
 » liis late linearibus culmoque striatis villosiusculis ,  
 » panicula elongata erecta, ramis filiformibus strictis  
 » inferne nudis superne ramulosis multi-locustiferis ,  
 » spiculis lineari-lanceolatis compressis , perigonio  
 » valvula exteriori 2-nervi aristam rectam sub-æ-  
 » quante. » COLLA pl: rar: chil: fasc: ined: t. LVIII.

XIX. KOELERIA Pers: ench: I. p. 97. = Spr: syst: n. 337. = P. de Beauv: agrost: t. 17. f. 4. = *Festucæ*, *Avenæ*, *Dactylidis*, *Bromi* et *Triodiæ* spec: nonnullæ quorund:

- » *Glumula* 2-valvis 2-pluri-flora, valvulis sub-
- » inæqualibus flosculis brevioribus. *Perigon*: 2-valve,
- » valvula exteriori sub apice emarginato-setosa. *Stigmata* sub-plumosa aspergilliformia. *Caryops*: libera.
- » Cetera fere ut in *Bromo*. »

*Obs*: Genus fructificatione prorsus artificiale et difficillime ab affinibus distinguendum nisi inflorescentia fere propria, sc: racemus arcte spicatus vel capitatus; species ex SPR: 9. inter quas 4. europææ, 4. ex *Indiis*, 1. patriæ dubiæ.

\* 1. *K. phleoides* = Pers: ench: I. p. 97. = Spr: syst: I. 332. *Festuca phleoides* Desf: atl: I. p. 90. t. 23. = Host: gram: austr: III. p. 15. t. 21. *Festuca aristata* Bertol: fl: ital: I. p. 624. ex L. *Bromus trivialis* Savi fl: pis: I. p. 124. t. 2. f. 2. (*Eur*: austr:, *Tauria*, *Afr*: bor: *Pedem*: in pascuis declivibus siccis ALL: auct: p. 42. sub *Festuca phleoidea*. RE fl: segus: p. 13. sub eadem, et fl: tor: I. p. 75. sub *Festuca cristata*. *Sarzanæ* copiosissima ubique, *Genuæ* in viis campestribus, *Liguria* occidua in litore a *Sestri di Ponente* BERTOL: l. c. p. 625. *Nicæa* DC. fl: fr: suppl: p. 271. *Sardin*: ad vias MORIS st: sard: I. p. 51.). Ann: Sub-cæspitosa erectiuscula, folia linearia sæpius pubescentia, racemus compositus spicæformis cylindricus quandoque lobis longiusculis lateralibus adactus pubescens, spiculæ parvæ sub-imbricatæ ovatæ

compressiusculæ 2-7-floræ, perigonii valvula exterior major in flosculis inferioribus brevi- et recto-setigera in superioribus plerumque mutica. Ab hac valde polymorpha vix differt *K. brachystachya* DC. h. monsp: 1813. p. 120., quam etiam possideo, habitu minore, flosculis *glabris*, setula *longiore*; non crescit quod sciam in *Italia*. Ad hanc speciem cl: DC. fl: fr: n. 1593. ducit cum dubitationis signo *Alopecurum ciliatum* ALL: n. 2150. a cl: BELLARDI inventum in pratis elatioribus *di Breglio*; sed sub hoc nomine illum non video a recentioribus Botanicis citatum, immo nec synon: ab ALL: suæ plantæ tributa; plantam non possideo et ideo nihil certi asserere possum.

2. *K. hispida* = DC. l. c. p. 119. Sub *Festuca* Bertol: fl: ital: I. p. 626. (*Ital: merid: Sardin: in arvis MORIS st: sard: I. p. 51.*). Differt a priori præsertim panicula *ovato-sub-capitata*, spiculis *sub-4-floris*, flosculis *hirsutis*, setula *rigida patente*.

XX. AIRA Lin: gen: ed: Schreb: n. 112. excl: paucis stirpib: = Spr: syst: n. 292. = Lam: ill: t. 44. = *Poæ*, *Koelericæ*, *Dactylidis*, *Holci*, *Panici*, *Eriachnes*, *Vilfæ*, *Ariopsidis*, *Millii*, *Deschampsicæ*, *Avenæ*, *Periballiæ*, *Hierochloes*, *Uralepidis*, *Phalaridis*, *Goldbachicæ*, *Catabrosæ*, *Campellæ*, *Airochloæ*, *Glycericæ*, *Molinæ* et *Corynephoi* spec: nonnullæ quorund:

» *Glumula* 2-valvis 2-flora (vel 3-flora flosculo  
 » tertio sæpius abortivo ex BERTOL:), valvulis sub-  
 » inæqualibus muticis flosculis brevioribus vel æqua-  
 » libus vel longioribus. *Perigon:* 2-valve, valvula ex-



» teriore latiore mutica vel aristata. *Squamulæ* ovatæ  
» integræ glabræ. *Stigmata* villosa. *Caryops*: libera. »

*Obs*: Genus mere artificiale et ex Auctoribus valde obscurum ceu liquet a multiplicibus synonymis supracitatis. D. LINN: inter *Airas* non admittebat species referentes flosculum tertium etsi abortivum. Constat autem ex SPR: stirpibus 50. per orbem sparsis, quarum media pars circiter europæa. Plantæ generatim gracillimæ, foliis linearibus, inflorescentia racemoso-spicæformi vel paniculata, spiculis parvulis nitentibus.

### A *Muticæ*.

\* 1. *A. aquatica* = L. sp: 95. = Spr: syst: I. 275. Bertol: fl: ital: I. p. 442. = Host: gram: austr: II. p. 30. t. 41. *Poa airoides* DC. (Ad rivulos in *Eur*: et *Amer*: bor: *Pedem*: locis apricis et inundatis ALL: n. 2189. *Sardin*: juxta rivulos MORIS st: sard: I. p. 49.). Peren: Repens inferne fluitans, folia late linearia obtusiuscula breviuscula, panicula laxa alternatim semi-verticillata, glumula flosculis altero sessili altero pedicillato brevior, perigonii valvulæ sub-æquales obtusæ.

\* 2. *A. cristata* = L. sp: 94. = Spr: syst: I. 275. Bertol: fl: ital: I. p. 434. = Sub *Poa* Host: gram: austr: II. p. 54. t. 75. Sub *Festuca* Pollin: Sub *Airochloa* Link: Sub *Koeleria* Pers.: , Gaud: (*Eur*: passim. *Pedem*: in pascuis siccis frequentissima ALL: n. 2188. RE fl: segus: p. 12. sub *Poa*. Speciatim frequens in arenosis secus *Sturam* prope *Venariam* RE fl: tor: I. p. 62. In glareosis *Ticini* et collium BIROLI fl: acon:

I. p. 29. sub *Poa* excl: syn: ALL: *Genuæ* in pratis collinis al *Zerbino*, in *M. Cenisio*, in *Lomellina* superiori a *Confienza* BERTOL: I. c. p. 435. *Sardin:* in pascuis et ad vias MORIS st: sard: II. p. 11.). Peren: Cæspitosa erectiuscula, folia anguste linearia sub-pubescentia, racemus spicatus inferne præsertim interruptus elongatus, spiculæ lanceolatae, glumulae valvulae inæquales ac flosculis paullulum breviores. Huc pertinet sec: BERTOL: *Koeleria parviflora* quam etiam possideo ex h. Vindeb.; sed specim: mea exhibent plantas statura undique multoties *minori*, racemis valde *brevioribus* et fere *ovatis*. Huc etiam videtur referenda *A. grandiflora* BERTOL: I. c. p. 436. quam legit *Sarzane* in monte *Nuda* prope castellum *di Ponzano*, differt enim tantummodo, fatente ipso Auctore, culmis *crassioribus* basi *bulbosis*, foliis sæpe *latioribus*, spiculis *ovato-oblongis* *duplo* aut *fere duplo* grandioribus. Hanc habeo ex hb. BIROLI sub nomine *Festucæ splendentis*.

\* 3. *A. valesiana* = All: auct: p. 40. = Spr: syst: I. 275. Bertol: fl: ital: I. p. 438. Sub *Koeleria* R. et S., Gaud: = Ico? (*Helvet: Pedem:* in aridis montanis locis præsertim collinis ALL: I. c.). Differt a priori speciatim foliis valde *angustioribus convolutosetaceis* glabris, culmo inferne *vaginis aphyllis imbricatis* tecto, racemo *continuo*, glumula flosculos *sub-æquante*. Herba tota glaucescens.

4. *A. agrostidea* = Loisl: not: p. 16. Bertol: fl: ital: I. p. 443. (*Hispan:, Gallia occid:, Sicil: Sardin:* in palustribus *Terranova* MORIS st: sard: III. p. 12.). Peren: Pusilla, folia anguste linearia plana, panicula laxa

ramis capillaribus, spiculæ minutissimæ, glumula flosculis duplo longior.

### B. *Aristatæ*.

\* 5. *A. flexuosa* = L. sp. 96. = Spr: syst: I. 276. Bertol: fl: ital: I. p. 450. = Host: gram: austr: II. p. 32. t. 43. *A. flexuosa* et *montana* All: Vern: Pron (*Eur:*, *Amer:* *Pedem:* in montibus et collibus ad oras sylvarum non infrequens ALL: n. 2192. pro *A. flexuosa*. Locis saxosis apricis alpium ALL: n. 2193. pro *A. montana*. In montibus *di Giaveno* et in *M. Cenisio* vulgatissima RE fl: segus: p. 11. pro *A. montana*. In rupibus vallis *Sessitis* BIROLI fl: acon: I. p. 26. pro *A. flexuosa*. In apricis alpinis vulgaris ibid: pro *A. montana*. *Liguria* orient: in montibus *del Bracco* BERTOL: l. c. p. 451.). Peren: Cæspitosa glabra, folia setacea radicalia multa culmea pauca remota breviora, panicula trichotoma valde flexuosa plus minus patens, spiculæ oblongæ, flosculi glumulam sub-æquantes, valvula externa supra basim aristata, arista capillacea exasperata flosculis longior primum recta demum geniculato-recurva. *A. montana* L. non videtur ad hanc stirpem spectare, sed potius ad *A. bottnicam* WAHLB: *A. flexuosa* et *montana* ALL: bene conjunctæ, nam hæc quæ invenitur in locis magis apricis, differt tantum panicula *patientiore*, spiculisque *minoribus* ac *minus* coloratis. *A. discolor* THUILL: fl: par: I. p. 39. quam habeo ex *M. Vesulo* lectam a cl: PERRET mihi non videtur diversa ab *A. flexuosa* uti jam adnotavit DC. fl: fr: n. 157. var:  $\gamma$ .



\* 6. *A. caespitosa* = L. sp: 96. = Spr: syst: I. 277. Bertol: fl: ital: I. p. 447. = Host: gram: austr: II. p. 31. t. 42. Sub *Deschampsia* P. de Beauv: Sub *Campella* Link: (*Eur: passim. Pedem: in dumetis secus flumen Stura frequens ALL: n. 2191. In pratis sub-humidis secus Duriam et prope Codizar supra Chaumont RE fl: segus: p. 11. In pratis humidis della Mandria alibique RE fl: tor: I. p. 62. Secus Sessitem et circa Novariam in pascuis et dumetis BIROLI fl: acon: I. p. 26. In pratis Apennini Liguriæ orient: ad S. Stephanum di Aveto, in pascuis montanis di Levenso BERTOL: l. c. p. 448.*). Peren: Valde cæspitosa elatiuscula scabriuscula, folia plana sulcata, panicula ampla diffusa ramis alterne fasciculatis, spiculæ oblongæ, flosculi glumulam sub-æquantes, valvula externa truncata basi vel supra aristata, arista rectiuscula scabra valvulam sub-æquans. Variat statura et spicularum colore ex viridi violaceo vel aureo fuscescente, glumula 3-flora flosculo altero abortivo, arista sub-nulla.

\*? 7. *A. alpina* = L. sp: 96. = Spr: syst: I. 277. = Vahlomb: lapp: p. 34. t. 111. (*Lappon:, Scotia. Pedem: in summis alpibus occurrit sec: ALL: n. 2194.*). Peren: Glabra parum elata, folia radicalia cæspitosa rigidiuscula convoluta culmea parum brevia, panicula coarctata recta ovata brevis, flosculi glumula longiores, arista flosculi inferioris dorsalis valvulam sub-æquans superioris omnino terminalis brevissima. Post ALL: nemo ex nostratibus *A. alpinam* L. inter stirpes pedemontanas recensuit. Cl: BERTOL: fl: ital: p. 449. *A. mediam* ex montibus *Etruriæ* describit,

cui tribuit syn: *A. alpinam* SAVI non L., sed specim: meum unicum ex PERRET magis quadrat cum *A. alpina* L. quam cum *media* BERTOL.; asserere tamen non audeo, plantam hanc crescere in alpibus nostris tum ex silentio Auctorum, cum quia in scheda citati specim: inscribitur generatim « *in summis alpibus*, » nec mihi unquam occurrit.

\* 8. *A. caryophyllea* = L. sp: 97. = Spr: syst: I. 277. Bertol: fl: ital: I. p. 455. = Host: gram: austr: II. p. 33. t. 44. (*Eur: passim. Pedem: locis glareosis collium frequens* ALL: n. 2197. Ubique in pascuis prope *la Molinetta* RE fl: tor: I. p. 63. In viis sabulosis *Aconiae* frequens BIROLI fl: acon: I. p. 26. *Sarzanæ* in monte *Darme* et in collibus *di Belvedere* BERTOL: l. c. p. 456. *Sardin: in pascuis aridis* MORIS st: sard: I. p. 49.). Ann: Cæspitosa glabriuscula parum elata, folia setacea, panicula trichotoma divaricata ramis capillaribus, spiculæ ovato-oblongæ minimæ, flosculi sessiles basi pilosi glumula breviores, valvula externa apice 2-seta dorso infra medium aristata, arista exserta. Variat flosculo altero mutico, altero aristato (var:  $\beta$  BERTOL:). Hanc habeo a BERTERO e collibus *Albensibus* sub nomine *A. pulchellæ* W. Vid: RE app: II. p. 191. Variat quoque statura majori (var:  $\beta$  *major* GAUD: fl: helv: I. p. 327. *A. canescens* Host: gram: austr: IV. p. 21. t. 36. non L.).

\* 9. *A. capillaris* = Spr: syst: I. 277. excl: syn: Host: = Bertol: fl: ital: I. 457. = *A. pulchella* Nocc: et Balb: fl: ticin: I. p. 403. t. 1. excl: syn: W. *A. caryophyllea* var: plurium Auctorum (*Ital: Sarzanæ* in arvis et in collibus locis herbidis et inter sata

BERTOL: I. c. p. 458. *Sardin*: in pascuis aridis montanis MORIS st: sard: I. p. 49. sub *A. pulchella*.). Vix differt a priori, cujus forsitan melius var:, statura majori, panicula valde ramosiore, ramis firmioribus, spiculis minoribus. Cons: GAUD: fl: helv: I. p. 327. in obs: In *Pedem*: proprie dicto illam numquam vidi.

\* 10. *A. præcox* = L. sp: 97. = Spr: syst: I. 277. Bertol: fl: ital: I. p. 454. = Host: gram: austr: IV. p. 22. t. 37. Sub *Avena* P. de Beauv: (*Eur*: passim. *Pedem*: in pascuis siccis montanis nascitur, in montibus *di Andra* supra *Eporediam* frequens ALL: n. 2196. In pascuis circa *Domum Ossulæ* locis aridioribus rara BIROLI fl: acon: I. p. 26. Ad *Ticini* promomptorium observavit idem BIROLI mss: ined: sub *Avena*.). Ann: Cæspitosa pumila glabra, folia convoluto-setacea, panicula parce composita sub-spicæformis breviuscula, flosculi sessiles basi sub-nudi glumulam sub-æquantes, arista articulata valvula externa apice 2-seta duplo longior. Habeo specim: vix digitalia, alia vero palmaria et ultra.

\* 11. *A. pubescens* = Vahl: symb: III. p. 9. = Spr: syst: I. 278. Bertol: fl: ital: I. p. 439. = Barr: ic: 717. Gerard: galloprov: p. 77. f. 1. Sub *Phalaride* Lam: aliique. *Alopecurus litoreus* et *Holcus arenarius* All: *Koeleria villosa* Pers: aliique (*Gallia*, *Ital*: Ad litora marina *Nicæa* ad flumen *le Var* ALL: n. 2151. sub *Alopecuro litoreo*. In arena ad maris *Nicæens*: litus ALL: auct: p. 46. sub *Holco arenario* c. descr: *Sardin*: in arenis maritimis *Quartu* MORIS st: sard: I. p. 49.)). Ann: Simplex vel cæspitosa plus minus elata molliter pubescens, folia late linearia



plana, panícula spicæformis seu racemus densiflorus ovato-oblongus (in *Holco arenario* ALL:) vel oblongo-cylindræus (in *Alopecuro litoreo* ALL:), flosculi glumulam sub-æquantes nunc alter solitarius sessilis cum pedicello abortivo alterius flosculi, quod venit in ALL: sub nominibus *corollæ hermaphroditæ* et *corollæ masculæ*, nunc 2. fertiles inæquales; etiam sub apice valvulæ exterioris brevissimam quidem sed constantem vidi, unde stirps excludenda ab *A. muticis*, inter quas illam descripsit cl: BERTOL:

\* 12. *A. hirsuta* = Schleich: cat: p. 55. = Spr: syst: I. 278. Bertol: fl: ital: I. p. 856. Sub *Festuca* DC. fl: fr: n. 1592. Sub *Koeleria* Gaud: fl: helv: I. p. 267. = Ic: ? (Alpib: *Helvet*: Ex valle *Sessitana* in alpibus summis *della Rosa* legit CARESTIA sec: BIROLI mss: ined:). Stirps rarissima peren: parum elata, folia glabra radicalia multa angusto-linearia planiuscula abbreviata culmea perpauca, culmi superne longe nudi infra paniculam tomentosi, panícula spicæformis cylindrica vel ovata basi interrupta ex violaceo et viridi aurata, glumulæ valvulæ valde inæquales, perigonii valvula exterior hirsutissima apice recte aristata interior glaberrima sub-2-fida.

\* 13. *A. sub-spicata* = L. sp: 95. = All: n. 2190. = Host: gram: austr: II. p. 33. t. 45. *A. spicata* Bertol: fl: ital: I. p. 445. Jacq: coll: III. p. 32. t. 19. f. 3. Sub *Avena* Gaud: *Trisetum airoides* P. de Beauv: (In alpib: *Eur*: *Pedem*: in pratis summis *M. Cenisii*, *Groscaval*, *Ceresole* frequens, in *M. Magni S. Bernardi* ALL: l. c. RE fl: segus: p. 11. In pratis *M. Rosæ*, *Mori* etc. rara BIROLI fl: acon: I.

p. 25.). Omissa a SPR.: stirps tamen satis distincta etsi obscura pro genere; facies fere prioris, sed foliis latioribus interdum pubescentibus, glumula sub-3-flora flosculis sub-breviore ac præsertim valvula perigonii exterioris 2-fida, ac dorso longe aristata, arista articulata facile distinguenda.

\* 14. *A. articulata* = Desf: fl: atl: I. p. 70. t. 13. = Bertol: fl: ital: I. p. 453. = *A. canescens* Spr: syst: I. 279. et All: n. 2195. male. Sub *Corynephoros* P. de Beauv: aliique (*Eur*: austr.: *Afr*: bor: In sabulosis sterilibus *Liguria* ALL: l. c. Locis arenosis maritimis prope *Savona*, *Finale* et *Loano* BALB: misc: bot: p. 10. In sabulosis prope *Nicæam* DC. fl: fr: suppl: p. 261. *Sardin*: in pascuis collinis MORIS st: sard: III. p. 12.). Ann: Cæspitulosa, folia anguste linearia plana glabriuscula, panicula trichotoma strictiuscula demum patens ramis inferne longo tractu nudis, flosculi glumula sub-æquali breviores, valvula perigonii exterioris dorso basim versus aristata, arista valvula duplo longior articulata infra articulum contorta supra longe clavata. Confusa a nonnullis cum *A. canescente* L. quæ in *Liguria* non crescit quod sciam. Differentias específicas adamussim adnotarunt ell: DC. l. c. et BERTOL: l. c. p. 454.

XXI. CYNOSURUS Lin: gen: ed: Schreb: n. 118. excl: nonnull: stirpib: = Lam: ill: t. 47. = *Cynosurus* et *Chrysurus* Spr: syst: n. 345. 308. = P. de Beauv: agrost: p. 66. t. XIV. f. 1. pro *Cynosuro* et p. 123. t. XXII. pro *Chrysuro* = *Cynosurus* et *Lamarkia* DC.

» *Spiculæ* secundæ tectæ floribus sterilibus (*bracteæ* Auctor:) et fertilibus. In *sterilibus* valvulæ alternæ distichæ muticæ vel aristatæ. In *fertilibus* glumula 2-valvis, valvulis sub-æqualibus muticis. » *Perigon*: 2-valve, valvula externa apice 2-dentata vel integra aristata. *Stam*: 3. *Styl*: 2. stigmatibus plumosis. *Squamulæ* 2. *Caryops*: oblonga 2-rostrata libera vel corticata e valvula perigonii interna. »

*Obs*: Auctoritate cll: GAUD: et BERTOL: genera *Cynosuri* et *Chrysuri* iterum jungenda duxi, etsi enim habitu, inflorescentia præsertim, discrepantia, character tamen essentialis sistens in spicularum structura identicus. Constat autem 4. stirpibus europæis, annuis vel perennibus, foliis linearibus, floribus paniculatis vel racemosis secundis.

1. *Chrysuri* Spr: (Flores paniculati.).

\* 1. *C. aureus* = L. sp: 107. = Bertol: fl: ital: I. p. 590. = Host: gram: austr: III. p. 4. t. 4. Ic: taur: vol. 14. t. 39. Sub *Chrysuro* Spr: syst: I. 296. *Crysurus cynosuroides* P. de Beauv: p. 14. t. 22. f. 5. *Lamarkia aurea* Moench: DC. (*Eur*: austr: In agro *Nicæens*: locis sterilibus mari proximis ALL: n. 2184.



*Genuæ* in muro oppidi prope *la Darsena*, *Ligur*: occid: ad *Albingaunum* et ad *Alassio* BERTOL: l. c. p. 591. *Sardin*: ad muros vetustos MORIS st: sard: I. p. 50. sub *Chrysuro*). Ann: Sub-cæspitosus parum elatus, folia plus minus late linearia nunc glabra nunc pubescentia, racemus elongatus aureus racemulis subnutantibus interdum 2-fidis, flores steriles locustæ-formes lanceolato-lineares valvulis simplicibus muticis 2. inferioribus oppositis ceteris alternis minoribus, caryopsis corticata.

2. *C. elegans* = Desf: fl: atl: I. p. 82. t. 17. Sub *Chrysuro* Spr: syst: I. 296. (*Ital*: merid:, *Afr*: bor: *Sardin*: in montanis frequens MORIS st: sard: I. p. 50. sub *Chrysuro gracili*). Præcedenti gracilior, folia anguste linearia mollissima, racemus ovatus breviusculus laxis viridi lutescens racemulis dichotomocorymbosis, glumulæ fertilis valvulæ apice setaceo-acuminatæ, perigonii valvula exterior longe aristata, caryopsis libera. Variat racemo graciliori oblongo-lineari (*C. gracilis* VIV: *Chrysurus gracilis* MORIS). Specim: sub hoc nomine e MORISIO habitum exhibent omnino diversum a planta picta a DESF: l. c.

\* 3. *C. echinatus* = L. sp: 105. = Bertol: fl: ital: I. p. 586. = Host: gram: austr: II. p. 67. t. 95. Sub *Chrysuro* Spr: syst: I. 296. Vern: *Coetta*, *Fenazza* etc. (*Eur*: passim. *Pedem*: in agris præsertim secalinis montanis et collinis frequens ALL: n. 2183. RE fl: segus: p. 12. *Taurin*: extra *Segusii* portam et inter segetes collium RE fl: tor: I. p. 70. In cerealibus nec rarus BIROLI fl: acon: I. p. 30. *Sarzanæ* in arvis inter sata BERTOL: l. c. p. 587. In valle *Prætoria*

ad pedem *Pennini*, circa *Courmajour*, cis alpes in *Sabaudicæ* valle *Moujon* et in valle *Bagues* GAUD: fl: helv: I. p. 265. In *M. Cenisio* ipse legi. *Sardin*: in pascuis collinis MORIS st: sard: I. p. 50.). Ann: Erectus elatiusculus, folia late linearia elongata plana, panicula ovato-oblonga dense glomerata, spiculæ oblongæ fasciculatæ stramineo-nitentes bracteis pinnatis scariosis longissime aristatis, perigonii valvula exterior ovato-lanceolata 2-dentata e medio dentium longe aristata, aristæ omnes firmissculæ rectæ rufescentes.

2. *Cynosuri* Spr: (Flores spicati).

\* 4. *C. aristatus* = L. sp: 105. = Spr: syst: I. 349. Bertol: fl: ital: I. p. 584. = Host: gram: austr: II. p. 68. t. 96. Ic: taur: vol. 1. t. 63. Sub *Phleo* Scop: Vern: *Erba penà* (Eur: passim. *Pedem*: in pratis macilentis vulgaris ALL: n. 2182. RE fl: segus: p. 12. et fl: tor: I. p. 70. BIROLI fl: acon: I. p. 30. *Sarzancæ* in *M. Caprione* BERTOL: l. c. p. 585. *Sardin*: in pratis MORIS st: sard: I. p. 51.). Peren: Elatus erectus superne longo tractu nudus, folia angustissime linearia elongata sub-involuta acuminata, racemus spicæformis linearis densiflorus, spiculæ oblongæ compressæ (*cristatæ*) virides bracteis pectinatis acutis muticis, perigonii valvula exterior apice brevissime aristata.

XXII. SESLERIA Scop: fl: carn: ed: 1. p. 189. = Spr: syst: n. 334. = Lam: ill: t. 47. = *Oreochloæ*, *Cynosuri*, *Cenchri*, *Echinariæ*, *Pocæ*, *Triraphidis* et *Festucæ* spec: nonnullæ quorund:

» *Glumula* 2-valvis 2-pluri-flora, valvulis sub-  
 » æqualibus sub-setigeris. *Perigon*: 2-valve, valvula  
 » exteriore majore apice 3-7-dentata dentibus inæ-  
 » qualiter aristatis lateralibus quandoque muticis,  
 » interiore apice 2-furca vel eroso-dentata. *Squamulæ*  
 » 2. subulatæ (in *Echinaria truncatæ*). *Stigm*: longa  
 » brevissime pubescentia. *Caryops*: libera. »

*Obs*: Genus ex structura valvulæ exterioris perigonii, inflorescentia ac habitu facile distinguendum, constans 12. circiter stirpibus fere omnibus europæis, inter quas nonnullæ pro varr: tantum habendæ (2. ex *N. Holl*: 1. ex *Amer*:), perennibus, erectis, foliis linearibus mucronulatis crasse vaginantibus, floribus capitato-spicatis, spiculis involucratis, quandoque (in *Echinaria*) diclinibus sc: flosculo altero hermaphrodito, altero masculo aut sterili.

✱ 1. *S. echinata* = Host: gram: austr: III. p. 6. t. 8. = Spr: syst: I. 329. *Cenchrus capitatus* L. sp: 1488. *Echinaria capitata* Bertol: fl: ital: I. p. 510. ex Desf: = P. de Beauv: agrost: p. 11. t. 17. f. 2. (*Eur*: austr:, *Asia* min:, *Afr*: bor: Agro *Nicæens*: in *M. Braun* et circa *Sospello* ALL: n. 2288. sub *Cenchro capitato*. *Sardin*: in pascuis *Pula* MORIS st: sard: I. p. 52.). Ann: Simplicissima villosiuscula, capitulum sub-globosum demum c dentibus valvulæ perigonii exterioris rigidis et recurvatis echinatum. Cl:



BERTOL: monet locustas omnes esse ebracteatas, nam paleæ inferiores quæ pro bracteis vel involucrio a nonnullis habentur, sunt veræ *glumulæ sterilescentes*.

\* 2. *S. sphærocephala* = Ard: specim: alt: p. 20. t. 7. = Spr: syst: I. 329. Bertol: fl: ital: I. 507. = Host: gram: austr: II. p. 70. t. 99. *S. microcephala* DC. fl: fr: n. 1648. *Cynosurus sphærocephalus* Jacq: ic: rar: I. p. 3. t. 20. (*Ital: in alpib: Forojulensib: BERTOL: l. c. p. 507. Pedem: in summis alpibus M. Cenisii* inter diffractos lapides loco *Ronche* dicto *BELLARD: app: p. 9.*). Peren: Simpliciuscula, folia radicalia cæspitosa sub-filiformia culmea parca et breviora, capitulum sub-globosum bracteatum, spiculæ arcte imbricatæ oblongo-compressæ omnes fertiles inferiores bracteatae, bracteæ amplexicaules ovatae muticae superne denticulatæ, perigonii valvula exterior apice crassa uni-aristata. An planta *BELLARDI* referenda potius ad *S. tenellam* Host: l. c. t. 100? Differentia sistit in dentibus perigonii valvulæ exterioris subæqualibus omnibus aristatis in *tenella*, inæqualibus medio tantum aristato in *sphærocephala*; sed ex specim: meis valde dubito notas istas esse constantes.

\* 3. *S. disticha* = Pers: ench: I. p. 72. = Spr: syst: I. 329. Bertol: fl: ital: I. p. 508. = Sub *Poa* Jacq: pl: rar: I. p. 3. t. 19. Host: gram: austr: II. p. 55. t. 76. *Poa seslerioides* All: n. 2208. t. 91. f. 1. mala. *Orcochloa disticha* Link: (*Alpib: Helvet:, Eur: austr: Pedem: in pratis elatioribus Tendæ et Vinadii* ALL: l. c. c. descr: Frequentissima in montibus *di Giaveno* eundo ad jugum *Col della Rossa* ALL: auct: p. 40. RE fl: segus: p. 12. sub *Poa disti-*

*cha.* Ex *Col delle Finestre* retulit BERTERUS sec: BERTOL: l. c. p. 508. ). Distinguitur a priori, cui valde affinis, præsertim capitulis ovatis majoribus, spiculis distichis infima tantum tenuissime bracteata. Habeo exemplar ex cl: BELLARD: sub nomine *S. Halleri* sine patriæ indicatione, et cum phrasi seq: « *S. locustis* » *quinquefloris distichis calyce bidentato* Hall: hist: » n. 1447. » Hoc synon: tribuitur ab Auctoribus *S. distichæ*; laudatum exemplar differt tantum ab aliis de *S. disticha* foliis latioribus, vaginis crassioribus, capitulis parum longioribus, spiculis majoribus; ceterum in *S. disticha* locustæ variant a 3. ad 6-floras.

\* 4. *S. cærulea* = Scop: fl: carn: ed: 2. tom: I. p. 63. = Spr: syst: I. 329. Bertol: fl: ital: I. p. 502. = Host: gram: austr: II. p. 69. t. 98. Ic: taur: vol. 13. t. 22. f. 5. Sub *Cynosuro* L. sp: 106. Jacq: ic: rar: tom: I. p. 3. t. 21. (*Eur: passim. Pedem: in pratis montanis et alpinis* ALL: n. 2221. RE fl: segus: p. 12. *Liguria* occid: in alpihus *della Scaggia* retro *Pegli* et in monte *Ramazzo* retro *Sestri di Ponente*, *Liguria* occid: in *Apennino delle cento Croci*, in editis montis *S. Calloceri* vallis *Albingaunensis*, in *Apennino Liguriæ* orient: ad *S. Stephanum de Aveto* BERTOL: l. c. p. 504. *Sardin:* inter rupes *Marganai*, *Genargentu* MORIS st: sard: I. p. 52. omnes pro typo. *Pedem:* abunde in præruptis cataractæ *di Foresto* RE fl: segus: p. 12. Locis calidis ad summitatem montium *Tendæ* et *Ormeæ* aliisque similibus locis montium maritimorum, in rupibus *Villafrance Nicæns:* soli expositis, in valle *Pisii* frequens BALBIS addit: p. 86. *Sarzane* in summitate *M. Caprione*, in cultis

*di Languglia. Ligur: occid: BERTOL: l. c. omnes pro var: x cylindrica*). Peren: Valde polymorpha, folia linearia firma obtusiuscula vel acuta planiuscula vel convoluto-subulata, capitula spicata ovata vel oblongo-cylindræa, spiculæ sparsæ vel imbricatæ sub-3-floræ inferioribus bractea late ovata integra vel erosa involucriatis, perigonii valva externa 3-5-aristata. Huc auctoritate cl: BERTOL: jungendas duxi *S. cæruleam* et *cylindricam* Auctorum (*Festuca argentea* SAVI) etsi hanc sæpe observaverim statura majori, foliis acutioribus, spica cylindrica, spiculis imbricatis, aristis longioribus. Cl: RE adnotavit in scheda alterius ex specim: quæ possideo de *S. cylindrica*, in nostris frigidis alpibus ubi abundat *cærulea* illam non adinveniri, sed tantum crescere in locis montanis calidioribus. *S. elongata* Host: gram: austr: II. p. 69. t. 97. ex specim: meis a BALBISIO communicatis adamussim quadrat cum *S. cylindrica*. *S. tenuifolia* SCHRAD: fl: germ: I. p. 272. t. 6. f. 4. magis accedit ad typum et differt tantum foliis junceis. *S. microphylla* PERRET hb: non discrepat a typo.

XXIII. FESTUCA Lin: gen: ed: Scrb: n. 119. excl: nonnull: stirpib: = Spr: syst: n. 352. = Lam: ill: t. 46. = Poæ, Dactylidis, Bromi, Brizæ, Chascolytri, Agrostidis, Anthoxanthi, Arundinis, Schenodori, Vulpice, Brachypodii et Molinice sp: nonnull: quorund:

- » *Glumula* 2-valvis multiflora, valvulis sub-inæ-
- » qualibus, spiculis ovatis lanceolatis compressis sub-
- » brevioribus. Perigon: 2-valve, valvula exteriori apice



» mucronata vel aristata interdum mutica inferiore  
 » 2-dentata ciliata. *Stam*: 3. rarius 1. *Stigm*: plu-  
 » mosa. *Squamulæ* 2. *Caryops*: 1-sulcata libera intra  
 » perigonium persistens. »

*Obs*: Genus ex Auctoribus valde obscurum pro vera determinatione, hinc stirpes nonnullæ modo ad unum modo ad alterum ex supra citatis generibus amandatæ. Cl: BERTOL., suppressis generibus *Koeleria*, *Vulpia* et *Brachypodii*, in 4. sectiones *Festucam* dividit, retentis in prima *Festucis genuinis*, aliis ad memorata genera amandatis. Cl: SPR., admissa *Koeleria* uti nos ipsi fecimus, nonnullas species BERTOL: excludit a *Festuca*, atque hanc ex foliorum structura in varias dividit sectiones 63. stirpes constituentes, unde facilius earum perquisitio evadere videtur. Eandem fere dispositionem secutus est cl: GAUD: fl: helv: I. p. 272. 273. admissa primum distinctione inter *Festucas monandras* et *triandras*. Herbæ per orbem sparsæ, quarum fere dimidia pars europææ, annuæ vel perennes, foliis linearibus sed variis, inflorescentia paniculata.

1. *Foliis omnibus setaceis filiformibus.*

\* 1. *F. ovina* = L. sp: 108. = Spr: syst: I. 352. = Host: gram: austr: II. p. 60. t. 84. *F. duriuscula* var: x Bertol: fl: ital: I. p. 603. Ic: taur: vol. 12. t. 77. f. 2. 3. (*Eur*: passim. *Pedem*: in pascuis et pratis non irriguis montanis præsertim ALL: n. 2240. RE fl: segus: p. 12. Uberrime in sylvis della *Mandria* alibi- que RE fl: tor: I. p. 71. In pascuis collium et *Ticini*

aridis frequens BIROLI fl: acon: I. p. 30. In collibus *Genuensibus* BERTOL: l. c. p. 605.). Peren: Valde cæspitosa plerumque humilis, folia radicalia numerosissima culmea perpauca breviora ligula 2-aurita, panicula erecta coarctata, spiculæ ovato-oblongæ glabræ 3-4-floræ, perigonii valvula exterior obsolete 5-nervia mutica vel mucronata vel aristata. Stirps valde polymorpha ideoque ad illam referendæ tamquam varr: plures stirpes Auctorum, veluti *F. tenuifolia* SCHRAD: gracilis flosculis muticis, quæ reperitur in sylvis *Venariæ* (RE fl: tor: I. p. 71.), et in *Lomellina* prope *Confienza* (BERTOL: l. c. var: δ); *F. amethystina* Host: non ALL: rigidior spiculis inclinatis sub-muticis, lecta in pratis D. AVONDO prope *Venariam* (RE l. c. p. 72.), et in pratis siccis vallis *Alboneæ* (BIROLI l. c. p. 31.); *F. paludosa* GAUD: , spiculis sub-6-floris, flosculis minus teretibus muticis, quæ crescit in *Helvet:* et commutata fuit cum *F. tenuifolia* a cl: BERTOL: ; *F. vivipara* W. setacea gracillima, paniculis viviparis. Huc alias varr: refert BERTOL: sub *F. duriuscula*, sed hanc et nonnullas ex illis species distinctas constituere puto, quas suo loco enumerabo. An cum *F. ovina* conjungenda sit *F. longifolia* Viv: fr: fl: ital:, quam in promontorio *Portofino Liguriæ* crescere dicit, asserere non audeo; plantam non posideo, nec illam refert cl: BERTOL:

\* 2. *F. Halleri* = All: n. 2245. = Bertol: fl: ital: I. p. 607. = Ic: ? *F. hirsuta* var: Spr: syst: I. 352. (Alpib: *Helvet:*, *Ital:*, *Galliæ*. *Pedem:* in montanis sterilibus ALL: n. 2245. In *M. S. Bernardi* DC. fl: fr: n. 1591.). Differt a priori, cui valde affinis,

planta generatim *graciliori*, foliis *setaceis*, ligula 1-*aurita*, panícula *spicæformi*, spiculis *grandiusculis distichis sub-5-floris*, perigonii valvula *exteriore evidentius 5-nervi constanter aristata*, arista valvula *sublongiore*. Male confusa a SPR: cum *F. hirsura* HOST: et *cinerea* VILL:, quæ sunt *F. duriusculæ* varr: Nul- lum cernere potui discrimen inter *F. Halleri* et *F. alpinam* SUT:, quam habeo ex *Sabaud:*, quamque cl: SPR: ad *ovinam* amandat, et cl: GAUD: fl: helv: I. p. 279. describit pro distincta specie, si excipias aristas glumula breviores.

\* 3. *F. violacea* = Gaud: agr: helv: I. p. 231. et fl: helv: I. p. 278. = Sub *Schenodoro* R. et S. = Ic: ? (*Helvet:* in alpibus editioribus *Sabaud:* prope *M. Blanc* DC. fl: fr: suppl: p. 265. Ad *M. Sempronium* reperit REGNIER sec: RE app: II. p. 191.). Valde quoque accedit ad *F. ovinam* n. 1. ejus forsân var:, sed differt statura undique *minori*, foliis *capillaceis mollioribus*, spiculis *ellipticis oblongioribus* nec *ovatis* læte violaceis, perigonii valvula *exteriore brevissime* quidem sed *constanter aristata*.

\* 4. *F. glauca* = Lam: ill: 1034. t. 46. f. 3. = Spr: syst: I. 352. = *F. pallens* Host: gram: austr: p. 63. t. 88. Sub *F. duriuscula* Bertol: fl: ital: I. p. 602. (*Eur:* passim. *Pedem:* abunde in *M. Musinè* RE fl: tor: I. p. 72. sub *F. glauca* et app: I. p. 11. sub *F. pallente*. Habeo a BERTERO ex collibus *Albensibus*). Accedit magis ad *F. ovinam* ex ligula 2-*aristata*, sed tam ab illa quam a *F. Halleri* differt foliis radicalibus *brevioribus rigidioribusque* glabris, cul- mis angulatis extra vaginam brevem *longissime pro-*



*ductis*, panícula *longiore interrupta*, spiculis *oblongo-ellipticis* 6-8-*floris*, arista *breviore et debiliore*, ac demum planta tota *glaucescente*. Variat sec: GAUD: fl: helv: I. p. 284. foliis culmeis planiusculis vel complicato-plicatis ( $\beta$  *subalpina* et *montana*), et foliis rigidissimis longis crassisque ( $\gamma$  *crassifolia*).

\* 5. *F. valesiaca* = Gaud: agr: helv I. p. 242. et fl: helv: I. p. 283. = *F. glauca* var: Spr: syst: I. 352. Sub *F. duriuscula* Bertol: fl: ital: I. p. 602. = Ic: ? (*Valesia*. *Pedem:* in *M. Musinè* RE fl: tor: I. p. 72. et app: I. p. 11. Ex collibus *Albensibus* retulit BERTERUS. E locis arenosis vallis *Augustæ Prætoriae* PIOTTAZ). Vix a *glauca* diversa foliis *longioribus scaberrimis*, culmis *brevioribus teretiusculis*, panícula *longiore* et magis *coarctata*, spiculis *minoribus scabrioribusque*.

\* 6. *F. varia* = Haenk: in Jacq: coll: II. p. 94. = Spr: syst: I. 352. excl: syn: Bellard: = Host: gram: austr: II. p. 64. t. 90. *F. flavescens* var:  $\alpha$  Bertol: fl: ital: I. p. 596. *F. pumila* Vill: Host: gram: austr: II. t. 91. ? (*Eur:* med: *Pedem:* in locis siccis *M. Cenisii* BELLARD: app: p. 10. BALB: el: p. 86. RE fl: segus: p. 13. In alpibus præsertim *Siccidis* frequens BIROLI fl: acon: I. p. 31. omnes sub *F. pumila*). Vix spithamæa, folia radicalia numerosa rigidiuscula cæspitosa, culmi plerumque solitarii nudiusculi, panícula laxiuscula sub-nutans, pauci-locustifera sæpius secunda, arista sub-nulla. Huc pertinere videtur *F. erkia* BALB: el: p. 4. non DC. quam el: Auctor distinguit a *F. pumila* et tradit inventam a ROMOND in *Pyren:* (DC. fl: fr: n. 1589.). CONS: GAUD: fl: helv: I. p. 301.

Variat panicula *laxiori* sæpius *cernua*, spiculis *flavis* (*F. varia*  $\beta$ , *flavescens* GAUD: l. c. p. 300., *F. flavescens*  $\alpha$  BERTOL: l. c. non BELLARD:); ad hanc var: pertinet *F. amethystina* ALL: n. 2241. non Host: cum aliis syn: ibi citatis sub eadem non sub varr:  $\beta$  et  $\alpha$ ; nec non *F. acuminata* DC. fl: fr: suppl: p. 265. ab Auctore reperta circa *Tendam*; in hac panicula est pulchre variegata.

\* 7. *F. flavescens* = Bellard: app: p. 11. = Spr: syst: I. 362. *F. flavescens* var:  $\beta$  Bertol: fl: ital: I. p. 596. = Ic: ? (*Pedem*: non infrequens locis sylvaticis subalpinis vallis *Pisii*, *Limoni*, *Viù* et *M. Cenisii* BELLARD: l. c. Vulgaris in *M. Cenisio* atque in pratis alpinis *di Chianoc* RE fl: segus: p. 13. Abundat quoque in alpibus *di Grassoney* et *d'Allagna* BIROLI mss: ined: In sylvaticis thermarum *Valderiarum* BERTOL: l. c. p. 597.). Differt a *F. flavescente* Host:, cujus tamen forsitan melius var:, foliis *tenuioribus* saturatius *viridibus flaccidis*, culmo *elatiore*, spiculis constantius *secundis remotioribusque* sub-5-floris, flosculis *tenuissimis acuminatis oblique mucronulatis*.

## 2. *Foliis convolutis canaliculatis.*

\* 8. *F. ciliata* = DC. fl: fr: n. 1595. non Brot: = Spr: syst: I. 353. excl: syn: Bertol: fl: ital: I. p. 639. = Host: gram: austr: IV. p. 37. t. 65. *F. Myuros* Sav: et Sebast: non L. *Vulpia ciliata* Link: (*Eur*: austr: *Pedem*: in locis siccis calidisque ac speciatim in *M. Musiné* et prope *Taurinum* inter *Valentinum*

et pontem *Padi* RE fl: tor: I. p. 73. In agro *Nicæens*: DC. fl: fr: suppl: p. 268. *Sarzanæ* in muris campestribus et in summitate *M. Darne*, in dumetis *di Carbonara* in *Lomellina* BERTOL: l. c. p. 640. *Sardin*: in pascuis et in arvis MORIS st: sard: II. p. 11.). Ann: Cæspitosa monandra, folia anguste linearia cito convoluta-setacea pubescentia vel glabra ligula truncata erosula, racemus spicæformis elongatus sub-nutans ramis strictis sub-secundis, glumula sub-5-flora flosculis brevior valvulis valde inæqualibus exteriore minima, flosculi teretiusculi margine ciliato-barbati longeque aristati. Perperam a SER: confusa cum *Bromo barbato* SAV: ad *F. Alopecurum* PERS: pertinente nec unquam in *Pedem*: invento; hæc est *F. ciliata* BROT: non DC.

9. *F. incrassata* = Bertol: fl: ital: I. p. 643. ex Salz: *Bromus sabulosus* Guss: fl: sic: prodr: I. p. 120. *Br: sardous* Spr: c. p. p. 36. (*Sicil: Sardin*: australior: in pascuis maritimis MORIS st: sard: I. p. 50.). Plantam non possideo. Cons: pro descr: BERTOL: l. c.

### 3. *Foliis inferioribus setaceis superioribus planis.*

\* 10. *F. heterophylla* = Lam: dict: vol. III. p. 600. = Spr: syst: I. 354. Bertol: fl: ital: I. p. 609. = Host: gram: austr: III. p. 13. t. 18. (*Eur*: passim. *Pedem*: locis montanis saxosis *di Tenda* et *Mondovì* ALL: auct: p. 42. In sylvis montanis RE fl: segus: p. 13. In sylvis prope *Eremum* RE fl: tor: I. p. 9. In summis alpihus *di Formazza* rara BIROLI fl: acon: I. p. 31. *Sarzanæ* in castanetis montis *Darne*



loco dicto *Turri*, *Ligur*: orient: in monte *S. Jacobi* prope *Clavarum*, sylvaticis thermarum *Valderiarum* BERTOL: l. c. p. 609. 610.). Peren: Dense cæspitosa repens elata, folia radicalia triquetro-filiformia culmea plus minus late linearia omnia longissima sub-pubescentia, panicula elongata laxiuscula ramis sub-æqualibus, spiculæ sub-5-floræ graciles, arista tenuis valva exteriori plerumque brevior.

\* 11. *F. duriuscula* = L. sp: 108. = Spr: syst: I. 354. Bertol: fl: ital: I. p. 601. excl: variis synonym: = Host: gram: austr: II. p. 59. t. 83. pro typo, t. 85. pro var: *hirsuta* et t. 86. pro var: *stricta* (*Eur*: passim. *Pedem*: in pascuis siccis frequens ALL: n. 2243. RE fl: segus: p. 13. et fl: tor: I. p. 73. BIROLI fl: acon: I. p. 31. *Sarzanæ* ad aggeres circa oppidum contra *la Cittadella*, et in monte *Nuda* et *Brina*, *Genuæ* ad *Lagazzo*, *Ligur*: occid: in montibus *della Scaggia* BERTOL: l. c. p. 605. *F. duriuscula* sardoa quæ crescit in montanis *Genargentu* sec: MORIS st: sard: I. p. 51. videtur spectare ad *F. ovinam* n. 1. var: *tenuifolia* ex synonym: a MORISIO allato). Vix a priori diversa radice *fibrosa* nec repente, foliis *glabriusculis*, panicula *magiore* magis *laxa* et *nutante*, ramis *inæqualibus* generatim *longioribus*, spiculis *majoribus compressisque*. Huc pertinent sec: BERTOL: (præter plantas superius exclusas) seqq: a nostratibus inter pedemontanas enumeratas, sc: *F. stricta* RE app: I. p. 10. (in *M. Musinè*); *F. pallens* RE l. c. quam vidimus ad *glaucam* spectare; *F. dumetorum* L. et BELLARD: app: p. 10. (in pascuis siccis sylvaticis); *F. cinerea* VILL: et BELLARD: l. c. p. 11. (iis-

dem locis); *F. dura* Host: (in alpibus *Tendæ* DC. fl: fr: suppl: p. 266.); *F. hirsuta* Host: (*M. Musinè* RE app: I. p. 11.).

\* 12. *F. rubra* = L. sp: 109. = Spr: syst: I. 354. = Host: gram: austr: II. t. 82. *F. duriuscula* Bertol: fl: ital: I. p. 692. inter synon: (*Eur: passim. Pedem: in pratis alpium frequens* ALL: n. 2244. *BIROLI* fl: acon: I. p. 31.). Nimis præcedenti affinis, sed, fatente ipso BERTOL: l. c. p. 607., differt radice longissime *reptante*, foliis fere omnibus planiusculis cito *canaliculato-involutis pubescentibus*; adde ex specim: meis de planta ALL: paniculam esse *erectam ex violaceo-rubram*, spiculas majores *teretiusculas*, aristam *firmiorem et longiorem*. Cons: insuper GAUD: fl: helv: I. p. 285. et seqq: ubi 7. sub-species de sola *F. rubra* L. constituit.

\* 13. *F. Myurus* = L. sp: 109. = Bertol: fl: ital: I. p. 636. = Host: gram: austr: II. p. 66. t. 93. *F. bromoides* Spr: syst: I. 354. ex L. *F. Myurus* et *Bromus dertonensis* All: *Vulpia Myurus* et *bromoides* Link: (*Eur: med: et austr:, Amer: austr:, Afr: bor: Pedem: ubique locis sterilibus et secus agros macilentos* ALL: n. 2242. pro *F. Myuro*; speciatim inter *Dertonam* et *Novi* ALL: n. 2225. pro *Bromo dertonensi*. In pascuis sterilibus et ad limites agrorum ubique RE fl: segus: p. 13. et fl: tor: I. p. 73. In pascuis *Ticini* BIROLI fl: acon: I. p. 31. *Sarzanæ* copiosissima ad muros campestris, maceries et loca sicca BERTOL: l. c. p. 637. *Sardin: in aridis frequens* MORIS st: sard: I. p. 51. pro *F. bromoidea*). Ann: Sub-cæspitosa monandra, folia radicalia setacea per-

pauca et brevissima culmea multa valde elongata plus minus late linearia mox convoluta scabriuscula, flo- sculi compressiusculi scabri nec ciliato-barbati ; ce- tera uti in *F. ciliata* n. 8., cui valde affinis præser- tim ob flores *monandros*. *F. bromoides* L. eadem ac *Bromus dertonensis* ALL: non differt nisi statura mi- nori, racemo breviori et strictiori nec nutante, culmo superne nudo. Cons: insuper observationes cl: BERTOL: l. c. p. 639.

\* 14. *F. uniglumis* = Sm: engl: fl: I. p. 143. = Spr: syst: I. 354. Bertol: fl: ital: I. p. 634. = Host: gram: austr: IV. p. 37. t. 64. *Stipa membranacea* L. sp: 116. *Vulpia membranacea* Link: (*Anglia et Eur: austr: In litore maritimo di Loano et Savona* simi- libusque locis *Nicææ* BALB: misc: alt: p. 8. DC. fl: fr: suppl: p. 268. *Sardin: in arvis Campidano di Ca- gliari* MORIS st: sard: I. p. 51.). Præcedenti valde affinis ; statura magis accedit ad *F. bromoidem*, sed differt præcipue foliis latioribus longioribusque, va- ginis suprema præsertim inflatis, culmis crassioribus ad racemum usque foliosis, racemo strictissimo, al- tera ex glumulæ valvulis brevissima et fere sub-nulla unde nomen specificum.

\* 15. *F. poæformis* = Spr: syst: I. 354. = Ber- tol: fl: ital: I. p. 599. = Host: gram: austr: II. p. 58. t. 81. *Schoenodorus poæformis* et *violaceus* quo- rund: *Poa violacea* Bellard: (*Hungar: , Helvet: Pe- dem: in alpihus di Queiras* BELLARD: app: p. 214. t. 3. sub *Poa violacea*. *M. Cenisio* et alpihus *Tendæ* DC. fl: fr: suppl: p. 267. sub *Festuca rhætica*. Ex alpihus *Valderianis* retulit BERTERUS. In alpihus Ses-



*sitanis* montis *Rosa* invenisse D. CARESTIAM tradit BIROLI mss: ined:). Peren: Cæspitosa glabra, folia radicalia setaceo-involuta culmea paullo latiora, panicula strictiuscula flexuosa ramis inferioribus præsertim verticillatis, spiculæ ovatæ 3-6-floræ ex viridi et violaceo aureo-nitentes, flosculi pilis brevissimis basi involucrati perigonii valvula exteriori manifestissime carinata apice obiter 2-dentata inter dentes in aristam vel mucronulum tenuem brevissimum terminata.

\*? 16. *F. nigrescens* = Lam: dict: II. p. 460. = Spr: syst: I. 354. Sub *Schenodoro* R. et S. syst: II. p. 705. = Ic: ? (Alpib: *Eur*: med: Unum tantum nec optimum habeo exemplar ex alpib: *Sabaud*: a PERRET missum. In pascuis alpium vallis *Augustanæ* D. FERREIN observasse affirmat BIROLI in mss: ined:). Peren: Glabriuscula, folia radicalia tenuissima culmea parca planiuscula latiuscula, panicula oblonga patens ramis geminatis, spiculæ ovato-compressæ 4-5-floræ, arista nigrescens valvulam sub-æquans. An *F. rubræ* n. 12. var: ? Ita demum censuit cl: LAM: in ill: Cons: tamen DC. fl: fr: suppl: p. 266. et GAUD: fl: helv: I. p. 290.

#### 4. *Foliis omnibus planis.*

\* 17. *F. glomerata* = All: n. 2239. = Spr: syst: I. 354. = Ic: taur: vol. 1. t. 78. Sub *Dactylide* L. sp: 105. Bertol: fl: ital: I. p. 568. Host: gram: austr: II. p. 67. t. 94. aliorumq: (*Eur*: passim. *Pedem*: abunde in pratis ALL: l. c. RE fl: segus: p. 12. sub *Dactylide* cum seqq: RE fl: tor: I. p. 70. BIROLI fl: acon: I. p. 30. In pratis et locis herbidis *Sarzanæ*

et *Genuæ* BERTOL: l. c. p. 569. *Sardin:* in arvis MORIS st: sard: I. p. 51. sub *Festuca*). Peren: Sub-cæspitosa generatim elata, folia plus minus late linearia, panicula composita sub-secunda ramis elongatis patulis vel abbreviatis strictis, spiculæ dense glomeratæ glomerulis secundi-floris ovato-compressis vel globosis, perigonii valvula exterior compresso-canaliculata apice emarginata in medio mucronulata vel aristulata. *Dactylis hispanica* ROTM: eadem ac *glaucescens* W., quam habeo speciatim ex collibus *Albensibus* a BERTERO, non differt nisi statura minori, foliis sæpe conduplicatis, panicula plerumque tota glomerata ramis brevibus strictis glomerulis sub-globosis ut ipsa spicæformis adpareat.

\* 18. *F. serotina* = L. sp: III. = Spr: syst: I. 355. Bertol: fl: ital: I. p. 621. = Host: gram: austr: II. p. 65. t. 92. Sub *Agrostide* L. mant: I. p. 30. et All: n. 2157. Sub *Schenodoro* R. et S. Sub *Diplachne* Link: Sub *Molinia* Gaud: (*Helvet: merid: , Gallia , Ital: Pedem:* in pascuis et ad vias locis collinis calidioribus frequens ALL: l. c. In locis calidis *S. Georgii* et *Condoviarum* in regione dicta *la Roccea* RE fl: segus: p. 11. In pascuis calidioribus collium etiam in ericetis *Burgimaneri* BIROLI fl: acon: I. p. 24. omnes sub *Agrostide*. In locis calidis atque saxosis collium RE fl: tor: I. p. 75. sub *Festuca*. *Sarzanzæ* in summitate montis *Darme*, in sylvaticis *Genuensib:*, in viciniis *di Finale* BERTOL: l. c. p. 622. Habeo ex sylvis apricis *Albæ* ex BERTER:). Peren: Valde repens sub-stolonifera statura mire varia in culmis, sed hi semper ab imo ad apicem foliosi,

folia breviora rigida acuta patentia vaginis arctis internodia sub-æquantibus, panicula erecta brevis pauciflora, spiculæ conicæ subulatæ flosculis valde remotis stigmatibus coloratis, quibus characteribus a *Festuca* præsertim differt, unde genus *Molinia* a KUNTH creatum, ac a GAUD: secutum; perigonii valvula exterior lanceolata erosulo-emarginata in medio sub-aristulata.

\* 19. *F. spadicæa* = L. syst: ed: 12. tom: II. p. 732. = Spr: syst: I. 355. Bertol: fl: ital: I. p. 611. = Host: gram: austr: III. p. 14. t. 20. Sub *Schenodorus* R. et S. *Poa Gerardi* All: n. 2201. et ic: taur: vol. 19. t. 39. *Anthoxanthum paniculatum* L. sp: 40. (*Eur: med: Pedem: frequens in pratis et pascuis Alpium* ALL: l. c. Copiose in alpidibus *di Chianoc* RE fl: segus: p. 12. sub *Poa Gerardi*. Abunde in *M. Musinè* RE fl: tor: I. p. 75. Non frequens secus *Aconiam* BIROLI fl: acon: I. p. 32.). Peren: Glabra, folia radicalia prælonga primum planiuscula mox cylindraceo-involuta culmea plana breviora pauciora unde culmi longo tractu nudi, panicula elongata ramis geminis vel solitariis sub-patulis, spiculæ grandiusculæ ovato-compressæ 3-5-floræ luteæ, flosculi mucronati mutici.

\* 20. *F. sylvatica* = Vill: dauph: II. p. 105. t. 2. f. 8. = Spr: syst: I. 855. *F. calamaria* Bertol: fl: ital: I. p. 614. ex Sm: = Host: gram: austr: IV. p. 34. t. 60. *F. altissima* All: auct: p. 43. *Poa trinerata* fl: dan: t. 1145. *Schenodorus calamarius* R. et S. (*Eur: passim. Pedem: locis lapidosis et umbrosis prope thermas Valderii et in valle d'Entrague prope* VOL. VI.



Sacellum *S. Joannis* ALL: l. c. c. descr: Habeo lectam circa *Bussolino* a *BERTERO*). Peren: Cæspitosa crassa elata, folia prælonga lanceolato-linearia et fere ensiformia, panicula oblonga sub-secunda ramis geminis ternatisve superne ramosulis inferne nudis, spiculæ parvulæ oblongæ 3-5-floræ, flosculi remotiusculi acuminati mutici.

\* 21. *F. elatior* = L. sp: 111. = Bertol: fl: ital: l. p. 616. = Curt: fl: lond: vol. III. t. 25. *F. arundinacea* Gaud: aliique. *F. pratensis* Re aliique non Huds: *Bromus litoreus* Host: gram: austr: l. p. 7. t. 8. *Br: elatior* Spr: syst: I. 359. Sub *Schenodoro* R. et S. (*Eur: passim. Pedem: in pratis prope fossas aquarum* ALL: n. 2247. ex L. excl: aliis syn: In pratis pinguibus sub-humidisque RE fl: segus: p. 13. et fl: tor: l. p. 74. n. 11. et 12. sub *F. pratensi* et *elatiore*. In pratis irriguis et fossis oryzarum *BIROLI* fl: acon: l. p. 32. *Sarzanæ* in pratis humentibus et in alveo *Macræ* sub *Trebbiano*, in portu *Lunæ* in palustribus *al Molinello* prope *Spediam*, in *Ligur: orient: prope Gambaro* BERTOL: l. c. p. 617. *Sardin: ad rivulos in collibus MORIS* st: sard: l. p. 50. sub *Bromo*). Affinis priori, sed differt radice *repente*, foliis *angustioribus*, panicula *magis composita*, spiculis *majoribus* 5-7-floris, flosculis *sub-aristatis*; ceterum valde varians. Non confundenda *F. pratensis* RE cum *F. pratensi* HUDS: et SPR:, statura undique minori et habitu diversa, ceu rite monuit BERTOL: fl: ital: l. p. 619. Hanc non habemus in *Pedem:* et ad illam referenda *F. Phœnix* VILL: sec: R. et S. syst: II. p. 698. sub *Schenodoro*.

\* 22. *F. ligustica* = Bertol: fl: ital: I. p. 631. = Sav: cos: bot: p. 53. t. 3. f. 10. a b = *F. stipoides* Spr: syst: I. 356. excl: synon: *Bromus ligusticus* All: n. 2222. *Vulpia ligustica* Link: (*Eur: austr: In Ligur: ad litora maris ALL: l. c. In agro Nicæens: DC. fl: fr: suppl: p. 267. sub F. stipoidea. Sarzanæ in colle di Sarzanello sub arce, Genuæ in Albaro BERTOL: l. c. p. 682. Sardin: in pascuis et in pratis MORIS st: sard: III. p. 12.*). Ann: Sub-cæspitosa glabra, folia anguste linearia, panicula sub-coarctata viridiflavescens demum purpurascens ramis inferioribus geminis ceteris alternis, spiculæ grandiusculæ oblongo-compressæ sub-4-floræ, glumulæ valvula altera minima vel obsoleta altera flosculos sub-æquans, arista flosculis longior. *Bromus geniculatus* et *stipoides* L. tamquam synon: *F. ligusticæ* a DC. et SPR: citati pertinent ad *F. geniculatam* W. sec: BERTOL: fl: ital: I. p. 633. nec in *Liguria* crescunt, sed in agro *Pisano*, in *Sicilia*, nec non in *Sardin: in arvis Samassi* sec: MORIS st: sard: I. p. 51.

\* 23. *F. pinnata* = Huds: fl: angl: p. 48. = Bertol: fl: ital: I. p. 646. = *F. phænicoides* All: n. 2248. non L. et *Bromus pinnatus* n. 2234. ex L. Ic: taur: vol. 19. t. 38. Host: gram: austr: I. p. 18. t. 22. *Triticum pinnatum* Spr: syst: I. 325. Sub *Brachypodio* R. et S. (*Eur: passim. Pedem: in valle Sturæ prope Demont, in pratis et ad sepes in-comit: Nicæens: ALL: sub F. phænicoidea. In pascuis montanis et collinis frequentissime occurrit ALL: sub Bromo pinnato. Ubertim in pascuis et pratis macilentis RE fl: segus: p. 13. sub eodem. In pratis macilentis spe-*

ciatim della *Mandria* RE fl: tor: I. p. 76. sub *Festuca*. In nemoribus *Aconix* non rara BIROLI fl: acon: I. p. 34. sub *Bromo*. *Sarzanæ* et *Genuæ* copiosa in locis graminosis BERTOL: l. c. p. 648. *Sardin*: secus vias *Pula*, *Iglesias* MORIS st: sard: I. p. 53. sub *Tritico pinnato*.). Peren: Repens stolonifera, folia late linearia stricta, racemus in culmo simplici erectus, spiculæ sub-sessiles alternatim remotiusculæ teretiusculæ plus minus longæ lanceolatae vel lineares, flosculi arista longiores vel mutici. Planta valde varians speciatim in spicularum structura, hinc confusio non mediocris apud Auctores circa synonymiam, sublata tamen ab eximio BERTOL: l. c. Ex specim: meis nullam differentiam video inter *Bromum pinnatum* et *Festucam phœnicoidem* ALL:

\* 24. *F. phœnicoides* = L. mant: I. p. 33. non ALL: = Bertol: fl: ital: I. p. 649. = *Bromus Pluknetii* ALL: n. 2233. et auct: p. 41. Host: gram: austr: IV. p. 11. t. 19. *Triticum cæspitosum* Spr: syst: I. 325. aliique. Sub *Brachypodio ramoso* R. et S. (*Eur*: austr: *Pedem*: locis saxosis calidioribus prope *Aqui* et frequentissime locis similibus comit: *Nicæens*: ALL: ll. cc. c. descr: ad n. 2233. *Ligur*: occid: in promontor: *di Caprazoppa* BERTOL: l. c. p. 650. *Sardin*: ad vias et inter sepes MORIS st: sard: I. p. 52. sub *Tritico cæspitoso*). Vix differt a priori, cujus var: habetur a nonnullis et nuper a GAUD: fl: helv: I. p. 306., foliis angustissime linearibus, culmo ramosissimo decumbente, ramis distichis, quæ omnia habitum fere proprium ei tribuunt, ac demum statura minori, racemo graciliori, spiculis paucis flosculisque tenuioribus. Huc



pertinet *Bromus ramosus* L. mant: I. p. 34. non syst: nec ALL: , quem vidimus pertinere ad *Br: asperum* n. 10.

\* 25. *F. distachya* = W. en: p. 118. = Bertol: fl: ital: I. p. 651. Sub *Bromo* All: n. 2237. ex L. Ic: taur: vol. 24. t. 35. = Host: gram: austr: I. p. 16. t. 20. Sub *Brachypodio* R. et S. Sub *Trachynia* Link: *Triticum ciliatum* Spr: syst: I. 324. ex DC. (*Eur: austr: Pedem: in prov: Aquensi et comit: Nicæens: ad vias et agrorum limites ALL: l. c. In pascuis sterilibus di Mompantero atque supra Foresto RE fl: segus: p. 13. sub Bromo. Sarzanæ in M. Caprione, Genuæ in collibus al Lagazzo et in litore alla Foce, Ligur: occid: in litore a Sestri di Ponente BERTOL: l. c. p. 652. Sardin: ad sepes secus vias MORIS st: sard: I. p. 52. sub Tritico ciliato.*). Ann: Rigida scabra sub-cæspitosa parum elata, folia latiuscule linearia brevia sub-pubescentia, racemus spicæformis sæpius in duas spiculas sub-sessiles oblongo-lanceolatas compressas 8-20-floras divisus, glumulæ valvulæ parum inæquales flosculis multo breviores, perigonii valvula exterior acuminata exquisite 7-nervis aristam sub-æquans interior obtusa setoso-ciliata.

\* 26. *F. gracilis* = Moench: meth: p. 191. = Bertol: fl: ital: I. p. 644. *Bromus gracilis* W. aliiq. *Br: pinnatus* Fl: dan: t. 164. non L. = *Bromus sylvaticus* Host: gram: austr: I. p. 17. t. 21. aliiq. *Bromus dumosus* All: auct: p. 42. aliiq. *Triticum sylvaticum* Spr: syst: I. 326. Sub *Brachypodio* R. et S. Gaud: (*Eur: passim. Pedem: frequens præsertim*

in dumetis sive in planitie sive in locis montanis et collinis ALL: l. c. Ubique in dumetis RE fl: segus: p. 13. sub *Br: dumoso* et fl: tor: I. p. 76. sub *Festuca gracili*. In nemoribus *Campolati* dictis a *Pozzolo* unice invenit BIROLI fl: acon: I. p. 33. sub *Bromo gracili* pro var: *glabra*, et ad vias collium vulgaris var: *pilosa* ibid: sub *Br: dumoso*. *Sarzanæ* ad sepes in colle *di Sarzanello*, *Genuæ* in collibus *al Zerbino*, *Confienza* in *Lomellina* BERTOL: l. c. p. 645.). Accedit ad *F. pinnatam* n. 23. sed differt præsertim radice *fibrosa* nec *repente*, racemo *sub-nutante*, spiculis magis *approximatis* et generatim *majoribus*, flosculis superioribus *arista brevioribus* numquam tamen *muticis*. Variat statura et spiculis *glabris* vel *villosis*, unde binas species admiserat cl: BIROLI l. c. sed ipse in mss: ined: observavit postea, ex seminibus unius alteram speciem obtinuisse.

\* ? 27. *F. divaricata* = Desf: atl: I. p. 89. t. 22. = Spr: syst: I. 356. = Sub *Tritico* Bertol: fl: ital: I. p. 315. Sub *Schenodoro* R. et S. Sub *Sclerochloa* Link: (*Sicil: Terracina, Afr: hor: In maritimis inter Albenga et Loano* BALB: misc: p. 12.). Fide BALBISH numero hanc stirpem quam numquam vidi, sed vereor illam confusam fuisse cum *Tritico maritimo* L. quod suo loco referam.

28. *F. capitata* = Balb: in Spr: c. p. p. 36. *F. depauperata* Bertol: fl: ital: I. p. 620. Ic: ? (*Sardin: in pascuis Fonni* MORIS st: sard: II. p. 11.). Peren: Glabriuscula, folia breviter anguste linearia patentia, racemus spicæformis simplicissimus, spiculæ remotæ

parvæ ovato-compressæ 3-6-floræ coloratæ muticæ. Retinui nomen BALBISH uti antiquius et jam a SPR: receptum.

XXII. ARUNDO Lin: gen: ed: Schreb: n. 124. excl: variis stirpib: = Spr: syst: n. 354. = Lam: ill: t. 46. = Czernyæ, Trichoomi et Ampelodesmos sp: nonnullæ quorund:

» *Glumula* 2-valvis multiflora, valvulis flosculos  
» sub-æquantibus. *Perigon*: 2-valve basi piloso-bar-  
» batum, valvulis inæqualibus, exteriore majore sub-  
» aristata sæpius demum 3-cuspidata. *Squamulæ* 2.  
» minutæ. *Caryops*: libera intra corollam persistentem.  
» *Flores* ample paniculati quandoque dioici. »

*Obs*: Genus pro stirpibus Linnæanis valde obscurum, demum a cl: BERTOL: eximie lucrubatum et in varias sectiones præsertim ex structura et situ pilorum in perigonio divisum, et sic genera *Donacis*, *Lariagrostidis*, *Ampelodesmos*, *Phragmites*, *Calamagrostidis* et *Deyeuxiæ* Auctorum in unum conjuncta; variæ tamen species affinitate longe disparatæ videntur, præsertim *Calamagrostides* ad *Agrostidearum* trib: pertinentes, unde tutius cernui, characteribus supra allatis retentis, ad *Arundinem* referre tantum stirpes Sprengelianas inter quas 3. europææ, 6. exoticæ sunt.

\* 1. *A. Phragmitis* = L. sp: 120. = Spr: syst: I. 360. Bertol: fl: ital: I. p. 741. = Host: gram: austr: IV. p. 23. t. 39. Ic: taur: vol. 22. t. 79. *Czernya arundinacea* Presl: *Phragmitis communis* Trin: Gaud: alijq: Vern: *Canin*, *Canetta* (*Eur*: passim. *Pedem*:



secus fluvios et lacus ubi aquæ stasim patiuntur ALL: n. 2262. Passim in locis paludosis RE fl: segus: p. 14. et fl: tor: I. p. 82. In *Ticini* paludosis et oryzarum nimis infesta BIROLI fl: acon: I. p. 36. *Sarzanæ* in fossis *alla Marinella* BERTOL: l. c. p. 742. *Sardin:* ad aquas stagnantes MORIS st: sard: I. p. 50.). Peren: Repens cæspitosa elata, culmi graciles semifarcti, folia lanceolata longe acuminata scabra, panicula pyramidata diffusa ramosissima speciosa plus minus atropurpurascens, glumula sub 5-flora inæquivalvis flosculis brevior, flosculi acuminati mutici longe barbati.

\* 2. *A. Donax* = L. sp: 120. = Spr: syst: I. 361. Bertol: fl: ital: I. p. 732. = Host: gram: austr: IV. p. 22. t. 38. *Donax arundinaceus* P. de Beauv: aliique. *Scolochloa Donax* Gaud: Vern: *Cana* (Eur: austr:, Afr: bor: *Pedem:* in *Monferrato* et collibus calidioribus adeo frequens, ut, licet data opera etiam excolatur, indigenatus jus mereri videatur ALL: n. 2261. Secus *Padum* versus *Breme* spontanea BIROLI fl: acon: I. p. 36. In præruptis montis *Delphini* ad mare in *Liguria* orient: BERTOL: l. c. p. 733. *Sardin:* in umbrosis MORIS st: sard: I. p. 49.). Peren: Basi suffruticosa, radix tuberosa crassa gemmifera, culmi firmi altissimi ad nodos diaphragmate clausi internodiis vacuis, folia duplo triplove latiora quam in priori, panicula longior et strictior, glumula sub-3-flora æquivalvis flosculos sub-æquans, flosculi 3-cuspidato-aristulati a basi ad medium barbati. Colitur abunde ad usus domesticos omnibus notos. Variat foliis albidoluteo-variegatis uti in *Phalaride arundinacea*.

\* 3. *A. tenax* = Vahl: symb: II. p. 25. = Spr:

syst: I. 361. = *A. Ampelodesmos* Cyrill: map: fasc: II. p. 30. t. 12. et Bertol: fl: ital: I. p. 739. Sub *Donace* R. et S. Sub *Ampelodesmo* Link: ( *Ital*: *Afr*: bor: In monte *Delphino* prope *Genuam* secus ædes *Gnecco* Viv: fragm: fl: ital: p. 138. et Bertol: l. c. p. 739. *Sardin*: in pascuis MORIS st: sard: I. p. 50. ). Peren: Valde cæspitosa, culmi firmiusculi generatim minores quam in præcedentibus toti fareti, folia rigida culmea anguste linearia mox convoluta, panicula secunda nutans, spiculæ sub-quadrifloræ ovatæ compressæ, glumula inæquivalvis flosculis brevior, flosculi mucronati basi breviter denseque barbati.

## Trib: IV.

HORDEACEÆ ( Spiculæ sessiles in spicam solitariam terminalem congestæ. Genera 36. ex Bartl: p. 29. quorum varia obscura. ).

XXIV. TRITICUM Lin: gen: ed: Schreb: n. 130. = Spr: syst: n. 328. = Lam: ill: t. 49. = *Secales*, *Bromi*, *Festucæ*, *Poæ*, *Cynosuri*, *Uniolæ*, *Rottbolliæ* et *Agropyri* spec: nonnull: quorund:

» *Glumula* 2-valvis multiflora, valvulis oppositis  
 » sub-æqualibus muticis vel 1-aristatis. *Perigon*: 2-  
 » valve, valvula exterior mutica vel 1-aristata, in-  
 » teriore 2-dentata. *Stam*: 3. *Stigm*: plumosa. *Squa-*  
 » *mulæ* 2. minutæ. *Caryops*: oblonga 1-sulcata libera  
 » vel rarius perigonio persistente corticata ( *spiculæ*  
 » rachidi articulatæ obversæ ). »

*Obs*: Genus varie ac artificialiter ab Auctoribus

divisum, constans 40. circiter stirpibus, quarum nonnullæ obscuræ, per orbem sparsis, præsertim in regionibus temperatis, multis europæis, annuis, bienn: vel perenn:, spica continua vel interrupta, in nonnullis perisperma farinaceum, in aliis corneum. Præsentia vel defectus aristarum in stirpibus hujusce generis parum faciendâ; occurrunt enim ejusdem speciei varr: muticæ vel aristatæ.

\* 1. *Tr: villosum* = Presl: cyper: et gram: sic: p. 48. = Spr: syst: I. 324. Bertol: fl: ital: I. p. 797. Sub *Secale* L. sp: 124. = Host: gram: austr: II. p. 35. t. 47. Sub *Agropyro* Link: (*Eur: austr: Pedem: lectum fuit prope il Follone della Veneria* RE app: I. p. 12. et fl: tor: I. p. 85. sub *Secale*. *Sardin: ad vias vulgatissimum* MORIS st: sard: I. p. 53.). Ann: Cæspitosum, folia linearia sub-pilosa, spica simplicissima parum compressa continua, rachis basi nuda hinc villosa, glumula 3-4-flora flosculis multo brevior valvulis pilosis hirsutisve longe aristatis, perigonii valvula exterior oblongo-lanceolata 5-nervis pilosa longius aristata quam glumula.

2. *Tr: unioides* = Vahl: symb: II. p. 26. Bertol: fl: ital: I. p. 819. (*Calabr: , Sicil: In arenosis Sardin: australior* MORIS st: sard: I. p. 53.). Ann: Humile cæspitosum, folia anguste linearia breviuscula, spica racemiformis sub-secunda, spiculæ paucæ alternæ sub-pedunculatæ ovato-oblongæ multifloræ (3-24.), valvulæ omnes muticæ; facie ad *Poam* potius vel ad *Brizam*, ad quas a nonnullis amandatum, accedere videtur.

\* 3. *Tr: tenellum* = L. sp: ed: 2. p. 127. excl:



syn: Moris: non Viv: = Spr: syst: I. 324. excl: syn: Vill: Bertol: fl: ital: I. p. 812. = Tr: *Halleri* Viv: ann: bot: I. part: 2. p. 155. t. 5. et fl: ital: fragm: fasc: I. p. 24. t. 26. Gaud: fl: helv: I. p. 356. Tr: *Poa* DC. fl: fr: n. 1668. excl: syn: Pluk: (*Alsatia*, *Gallia*, *Helvet*., *Ital*: *Pedem*: in pascuis declivibus soli expositis et in agro *Nicæens*: ALL: n. 2269. In arenosis secus torrentes RE fl: segus: p. 14. In pascuis declivibus *della Molinetta* RE fl: tor: I. p. 87. sub Tr: *Poa*. In collibus apricis *Verbani* potius rarum BIROLI fl. acon: I. p. 38. *Ligur*: orient: in parte meridionali *M. S. Jacobi* prope ascensum *S. Annæ* in districtu *Clavarensi* BERTOL: l. c. In aridis collinis *Sardin*: med: MORIS st: sard: I. p. 52. sub Tr: *Halleri*). Ann: Glabriusculum sub-cæspitosum statura valde varians, folia convoluto-setacea acuta, spica racemiformis valde longior quam in priori, spiculæ duplo triploque minores ac remotiores pauciores flores referentes (3-10.) valvulis pariter omnibus muticis. Errat SPR: dum hanc stirpem refert ad Tr: *biunciale* Viv:

\* 3. Cr: *festucoides* = Bertol: pl: gen: p. 25. n. 49. et fl: ital: I. p. 808. = Tr: *hispanicum* Viv: ann: bot: I. part: 2. p. 162. t. 3. f. 2. = Tr: *Nardus* var: Spr: syst: I. 325. (*Ital*., *Ligur*: occid: a *Sestri di Ponente* in initio litoris *Genuam* versus BERTOL: l. c. p. 809. Habuit BERTOL: e *Sardin*: a MORISIO sed ab hoc non enumeratur in st: sard:). Priori valde affine, cujus forsitan var: ceu dubitavit BERTOL: ipse, sed differt præsertim valvula perigonii exteriori *aristulata*. In specim: missis a cl: Auctore tota planta

firmior etiam adparet, spiculæ crassiores; quidquid sit de discrimine inter hanc et præcedentem stirpem, certe non pertinet ad *Tr: Nardus* DC. uti censuit SPR:

\* 5. *Tr: unilaterale* = L. mant: I. p. 35. excl: syn: non All: nec Viv: = Bertol: fl: ital: I. p. 810. = *Tr: tenellum* Viv: ann: bot: I. part: 2. p. 154. t. 4. Host: gram: austr: II. p. 20. t. 26. non L. *Tr: Nardus* Spr: syst: I. 324. ex DC. *Tr: biunciale* All: auct: p. 46. ex Vill: (*Eur: austr: Amer: bor: Pedem: locis declivibus siccis* ALL: l. c. In pascuis aridis *di Foresto* et secus arva RE fl: segus: p. 14. In pascuis siccis declivibus *della Molinetta* BALBIS fl: taur: p. 23. *Ligur: orient: in viciniis di Levante*, in sylvaticis circa *Carthusiam di Pesio* BERTOL: l. c. p. 811. In pascuis saxosis *Sardin: med: MORIS st: sard: I. p. 53.* sub *Tr: Nardo*). Differt a priori, cui valde affine, præsertim spica *disticha* prorsus *secunda*, spiculis *magis* approximatis *minoribus sub-4-floris*, valvulis *acutioribus* sæpe breviter *aristatis*. *Tr: unilaterale* ALL: et Viv: pertinet ad *loliaceum* SM:

\* 6. *Tr: loliaceum* = SM: engl: fl: I. p. 185. et engl: bot: t. 221. = Spr: syst: I. 324. Bertol: fl: ital: I. p. 817. *Tr: unilaterale* All: n. 2270. = Viv: ann: bot: I. part: 2. p. 149. t. 3. f. 1. Host: gram: austr: II. p. 21. t. 27. non L. *Tr: Rotbollia* DC. (*Eur: austr: In litoribus maris Nicæens: ALL: l. c. Genuæ inter saxa al Molo nuovo* et in muro oppidi sub *la Lanterna*, *Ligur: occidua in litore a Sestri di Ponente* BERTOL: l. c. p. 818. *Sardin: in pascuis maritimis MORIS st: sard: I. p. 52.*). Differt a duobus

præcedentibus planta undique *glabra*, culmo *decumbente* generatim *crassiore*, foliis *planiusculis latioribus*, spica sæpius inferne *ramosa*, spiculis ovato-oblongis *turgidiusculis* cum *pedicello articulatis* 4-8-floris *constanter muticis*.

\* 7. *Tr: repens* = L. sp: 128. = Spr: syst: I. 325. Bertol: fl: ital: I. p. 803. = Host: gram: austr: II. p. 17. t. 21. Vern: *Gramon* (*Eur., Asia, Amer: passim. Pedem:* in pascuis et locis arenosis præsertim secus flumina frequens ALL: n. 2268. RE fl: segus: p. 14. et fl: tor: I. p. 86. BIROLI fl: acon: I. p. 38. *Sarzanæ* in arenis *Macræ*, *Genuæ* in herbidis *all'Aquasola* BERTOL: l. c. p. 805. *Sardin:* in arenosis MORIS st: sard: I. p. 53.). Peren: Radix valde repens stolonifera nimis infesta in locis cultis, culmus fistulosus, folia late linearia plana vel parum convoluta superne scaberrima, spica simplex compressiuscula plus minus elongata, spiculæ cuneato-ovatæ compressæ alternatim sub-imbricatæ lanceolato-lineares acutæ muticæ vel breviter aristatæ glabræ vel hirsutæ 4-8-floræ; variat multimode pro statione. Huc pertinent speciatim *Tr: rigidum* RE fl: tor: I. p. 87. n. 3. in arenosis circa *Venariam* et secus *Duriam* repertum, quod differt tantum habitu rigidiori, statura majori; *Tr: glaucum* Host: gram: austr: IV. p. 6. t. 10. et RE l. c. n. 4. crescens inter *Valentinum* et portam *Padi*, nec non prope *Venariam* ad sepes præsertim, et differens foliis glaucescentibus, spica elongata interdum basi interrupta; *Tr: litorale* Host: l. c. p. 5. t. 9. spiculis valde approximatis arctissime imbricatis muticis vel breviter aristatis. Varr: istæ referuntur a



SPR: ad *Tr: junceum*, quod juste contendit BERTOL: l. c.

8. *Tr: patens* = SPR: syst: I. 325. ex Brot: (*Eur: med: et austr: , Afr: bor: Sardin: in arvis circa Cagliari* MORIS st: sard: II. p. 12.). Plantam non posideo nec illam memorat cl: BERTOL: inter stirpes italicas.

\* 9. *Tr: junceum* = L. sp: 128. = SPR: syst: I. 325. excl: variis synon: Bertol: fl: ital: I. p. 799. = Host: gram: austr: III. p. 23. t. 33. Ic: taur: vol. 19. t. 37. et vol. 28. t. 88. *Tr: farctum* Viv: ann: bot: I. part: 2. p. 159. t. 8. (*Eur: austr: Ad vias et loca sicca in agro Nicæens: ALL: n. 2267. Ligur: occid: in litore inter Pegli et Pra præsertim circa cænobium S. Antonini* BERTOL: l. c. *Sardin: in arenis maritimis* MORIS st: sard: II. p. 12.). Differt a priori, cui affine, tota planta *glauca*, foliis angustioribus *convolutis*, culmis medulla *farctis*, spica valde *longiore laxiflora*, spiculis *remotioribus majoribus obtusis* constanter muticis. An huc referendum *Tr: acutum* DC. fl: fr: suppl: p. 282. quod Auctor invenisse tradit circa *Uneliæ*? Sic existimat SPR: ; plantam non vidi, nec eam enumerat BERTOL:

\* 10. *Tr: maritimum* = L. sp: 128. non Wulf: = SPR: syst: I. 325. Bertol: fl: ital: I. p. 814. = Cyrill: neap: pl: fasc: II. p. 2. t. 2. Scheuthz agr: p. 274. n. 3. t. 6. f. 5. Sub *Festuca* DC. fl: fr: n. 1575. non L. (*Gallia austr: , Ital: In litore Clavarensi alle Saline, Liguriæ occid: maritimis a Laigueglia et al Ceriale, Nicæa* BERTOL: l. c. *Sardin: in pascuis maritimis* MORIS st: sard: II. p. 12.). Ann:

vel peren: Cæspitosum sub-decumbens, folia anguste linearia sub-involuta, spica ramosa, spiculæ oblongo-lanceolatæ compressiusculæ 4-8-floræ, glumula flosculis valde brevior, valvulæ omnes muticæ perigonii externa mucronata.

\* 11. *Tr: caninum* = Huds: angl: p. 58. = Spr: syst: I. 325. Bertol: fl: ital: I. p. 806. = Host: gram: austr: II. p. 20. t. 25. *Tr: sepium* DC. fl: fr: n. 1660. *Elymus caninus* L. sp: 124. (*Eur: passim. Pedem: in dumetis et sylvis frequens ALL: n. 2271. RE fl: segus: p. 14. sub Elymo et fl: tor: I. p. 86. sub Tritico. In sylvis della Vesca vulgaris BIROLI fl: acon: I. p. 37. sub Elymo. Sardin: in montanis Arizzo MORIS st: sard: III. p. 12. sub Tritico*). Peren: Erectiusculum elatum, folia late linearia acuminata plana scabra superne passim pilosa, spica simplex elongata sub-nutans, spiculæ alternæ oblongo-lanceolatæ compressæ 3-6-floræ, valvulæ glumulæ et valvula perigonii exterior aristata.

Obs: circa *Tritica* sativa.

Omittendas censui stirpes omnes quæ sub variis nominibus coluntur ob alimentum, quas cl: BERTOL: fl: ital: I. p. 795. videtur conjungere sub nomine *Tr: æstivi sylvestris*. Patria hujusce utillimæ cerealis est adhuc incerta quidquid laudatus Auctor arguere crediderit in Italia fuisse spontaneam, argumento ducto ex eo quod Ceres frumenta colere, molere et conficere Italos docuerit; immo ipsum habuisse specim: sylvestria ex *Sicilia Val di Mussano* a Pr: JANIO et

ex pascuis montanis *Sardiniae* a Pr: MORISIO addit ; attamen rogatus a me amicissimus Prof: iste utrum revera *Tr: aestivum sylvestre* inveniverit in *Sardin:* , negative respondit , ibi tamen frequens atque spontaneum esse *Tr: villosum*. *Tr: aestivi* culti habeo 20. circiter varr: ex cl: BIROLI quas coluit in H. Soc: Agriculturæ Novariensis quasque omnes degeneratas vidit majori vel minori temporis spatio uti *Tr: compositum* et *Tr: turgidum* , ceu monuit in mss: ined: Cl: GAUD: fl: helv: I. p. 356. et seq: inter species distinctas *Tr: culti* admittit 1. *Tr: vulgare* VILL: cui tribuit var: *Tr: aestivum* et *hybernium* L. = 2. *Tr: turgidum* L. cum var:  $\beta$  *compositum* ejusd: Auctoris. = 3. *Tr: durum* DESF: = 4. *Tr: polonicum* L. in quibus omnibus caryopsis est omnino libera. = 5. *Tr: spelta* L. = 6. *Tr: dicoccum* SCHRANK: = 7. *Tr: monococcum* L. in quibus caryops: est arcte corticata.

XXV. SECALE Lin: gen: ed: Schreb: n. 127. excl: *S. villoso* = Spr: syst: n. 326. = Lam: ill: t. 49.

» *Glumula* 2-valvis 2-flora cum tertii floris rudimento intermedio , valvulis angustis flosculis brevioribus. *Perigon:* valvula exterior acute plicato-carinata longe aristata. *Caryops:* libera. *Spica* simplicis. Cetera *Tritici*. »

*Obs:* Genus vix a *Tritico* distinctum characteribus allatis , nunc constans 2-3. stirpibus annuis vel perennibus inter quas undique colitur *S. cereale* = L. sp: 124. (vern: *Seil*) , planta ann: omnibus nota cujus patria incerta. In *Ital:* spontaneum habemus *S. montanum* Guss: quod possideo , et aliam novam stirpem a Vi-



SIANIO in *Dalmatia* detectam, habitu graciliorem, quam memorat BERTOL: fl: ital: I. p. 794. Utraque differt a *S. cereale* præsertim radice perenni.

XXVI. *ÆGILOPS* Lin: gen: ed: Schreb: n. 1572. = Spr: syst: n. 330. = Lam: ill: t. 839. (*Polyg: monoëc: L.*).

» *Glumula* 2-valvis 3-4-flora flosculis 1-2. superioribus masculis vel neutris, valvulis cartilagineis æqualibus apice truncatis et palmato-aristatis. *Perrigon*: 2-valve, valvula exterior 1-2-aristata vel dentata. In flosculis inferioribus hermaphroditis *stam*: 3. *Styl*: 2. brevissimi stigmatibus plumosis. *Squamulæ* 2. divergentes ciliato-barbatæ. *Caryops*: libera (Spiculæ rachidi flexuosa articulata compressa insculptæ). »

*Obs*: Genus inflorescentia præsertim habitum proprium referens, constans 6. circiter stirpibus europæis valde inter se similibus, ann: vel bien:

\* 1. *Æ. ovata* = L. sp: 1489. = Spr: syst: I. 327. Bertol: fl: ital: I. p. 785. = Host: gram: austr: II. p. 5. t. 5. (*Eur*: austr: *Pedem*: locis siccis ubique in comit: *Nicæens*:, *Liguria*, *Monteferrato*, prov: *Astensi*, circa *August*: *Taurin*: ALL: n. 2286. In pascuis sterilibus *Segusii* et supra *Foresto* RE fl: segus: p. 82. Prope *Taurinum* in propugnaculo ad navalis finem BALB: fl: taur: p. 169. et RE fl: tor: II. p. 154. *Genuæ* in collibus al *Lagazzo*, *Sarzanæ* in *M. Caprione* BERTOL: l. c. p. 786. *Sardin*: ad margines agrorum *Oristano* MORIS st: sard: I. p. 49.).

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Ann: Plerumque gregaria cæspitosa sub-decumbens, folia anguste linearia breviuscula scabra plus minus pilosa, spica brevis ovata, spiculæ turgidæ sub-3-floræ, glumulæ valvulæ sub-4-aristatæ, perigonii valvula exterior 3-dentata dentibus 2. aristatis altero mutico. Variat culmis prostratis evidentius geniculatis, foliis prorsus hirsutis (*Æ. geniculata* Roth: cat: I. p. 121.) ; var: hanc reperit BERTERUS in pascuis arenosis secus *Tanarum* prope *Albam*; ex collibus *Albensib:* retulit quoque stirpis typum.

\* 2. *Æ. neglecta* = Bertol: fl: ital: I. p. 787. ex Requien: = *Æ. ovata* P. de Beauv: agr: p. 13. t. 20. f. 5. = Sibth: fl: gr: I. p. 74. (*Ital: Sarzanæ* in campis triticeis prope *il Molino del Vescovo* BERTOL: l. c. p. 788.). Fide cl: BERTOL: hanc stirpem mihi ignotam hic refero; ex descr: vix differre videtur a priori spicis magis *elongatis* superne *attenuatis*, spiculis *sub-5-floris*, glumulæ valvulis *majoribus hispidis* palmato-3-aristatis, perigonii valvula externa margine *dense ciliato*.

\* 3. *Æ. triuncialis* = L. sp: 1498. = Spr: syst: I. 327. = Host: gram: austr: II. p. 6. t. 6. *Æ. triuncialis* et *triaristata* Bertol: fl: ital: I. p. 789. 790. (*Eur: austr: In agro Nicæens: præsertim secus agros inter Sospello et Castiglione* ALL: n. 2287. et auct: p. 47. *Sardin: in arvis et secus vias* MORIS st: sard: I. p. 49.). Differt a præcedentibus præsertim spica *cylindrica* elongata *sub-7-locustifera*, spiculis *longioribus sub-4-floris*, aristis *validioribus* superioribus præsertim longissimis. Ex descr: cl: BERTOL: non video ab hac stirpe differre *Æ. triaristatam* REQUIEN:

nisi rachide nuda nec extus hirsuta; ceteræ differentiæ levissimæ.

\* 4. *Æ. cylindrica* = Host: gram: austr: II. p. 6. t. 7. = Bertol: fl: ital: I. p. 792. *Æ. caudata* Spr: syst: I. 327. *Æ. squarrosa* DC. fl: fr: III. p. 721. n. 1655. \* = Schreb: gram: t. 72. f. 1. (*Pedem*: in vineis *Augustæ Prætor*: BALB: addit: p. 98. sub *Æ. caudata*? et misc: bot: p. 45. sub *Æ. squarrosa*. *Sardin*: in pascuis aridis MORIS st: sard: I. p. 49. sub *Æ. caudata* L.). Magis accedit priori quam præcedentibus, differt autem spica equidem cylindrica sed breviori graciliori et generatim quinque tantum locustifera, spiculæ terminalis valvulis longissime 1- aristatis, reliquis dentatis sub-muticis. An *Æ. caudata* L. ad hanc stirpem pertineat, valde dubito. Cons: R. et S. syst: II. p. 770. n. 1. et 2.

XXVII. HORDEUM Lin: gen: ed: Schreb: n. 129. = Spr: syst: n. 278. = Lam: ill: t. 49.

» *Glumula* involucriformis 1-flora 2-valvis, val-  
 » vulis angustissimis aristatis inter se distantibus.  
 » *Perigon*: 2-valve, valvula exteriori majore acumi-  
 » nata vel aristata. *Stam*: 3. *Stigm*: 2. sessilia latere  
 » interno plumosa. *Squamulæ* 2. *Caryops*: oblonga  
 » lateraliter 1-sulcata perigonio adhærens, raro li-  
 » bera (Spica continua articulata, spiculis seriato-  
 » ternis intermedia hermaphrodita lateralibus quando-  
 » que masculis vel neutris).

*Obs*: Genus ex dispositione spicularum facile distinguendum, constans 10. circiter stirpibus ann: vel



peren:, quarum 5. europææ, 4. cultæ et patriæ incertæ, 1. americana.

\* 1. *H. murinum* = L. sp: 126. = Spr: syst: I. 269. Bertol: fl: ital: I. p. 779. = Host: gram: austr: I. p. 25. t. 32. Ic: taur: vol. 1. t. 95. Vern: *Erba d' spi*, *Gran dl diavo*, *Gran servaj* (*Eur*: ubique. *Pedem*: ad vias et limites agrorum ubique ALL: n. 2273. RE fl: segus: p. 14. et fl: tor: I. p. 85. BIROLI fl: acon: I. p. 38. *Genuæ* et *Sarzanæ* BERTOL: l. c. p. 780. *Sardin*: in ruderatis MORIS st: sard: I. p. 51.). ANN: Cæspitosum adscendens, folia latiusculo-linearia scabra basi auriculata, spica crassiuscula compressiuscula mollissima, spiculæ laterales masculæ pedicellatæ intermedia hermaphrodita sub-sessilis, glumulæ valvulæ æqualiter aristatæ, valvula perigonii exterior longius aristata quam glumulæ.

\* 2. *H. pratense* = Huds: angl: p. 56. = Spr: syst: I. 269. Bertol: fl: ital: I. p. 781. *H. murinum* β L. sp: 126. *H. secalinum* Schreb: spicil: p. 148. n. 1167. = Host: gram: austr: I. p. 26. t. 73. aliique (*Eur*: pratis. In agro *Nicæens*: ALL: n. 2275. et BALB: misc: alt: p. 8. sub *H. secalino*). Differt a priori radice perenni, foliis angustioribus basi nudis, spica generatim brevior magisque compressa, spiculis gracilioribus omnibus setaceis scabris, flosculis lateralibus brevius aristatis.

\* 3. *H. maritimum* = With: bol: arrang: p. 172. = Spr: syst: I. 269. Bertol: fl: ital: I. 782. = Host: gram: austr: I. p. 27. t. 34. *H. geniculatum* All: n. 2274. t. 91. f. 3. (*Eur*: austr: maritimis. Ad litora

*Nicæens*: prope portum *di Limpia* ALL: l. c. c. descr: *Sarzanæ* in pratis maritimis prope ostia *Macræ* BERTOL: l. c. p. 783. In *Sardin*: pascuis MORIS st: sard: I. p. 55.). Ann: Cæspitosum decumbens grosse geniculatum nodis infractis et refractis, folia angusta late linearia scabrida sub-pilosa, spica ovato-oblonga brevior et minus compressa quam in præcedentibus, spicula intermedia paulo major flosculo longius aristato prædita, glumulæ valvula interna semi-lanceolata quod essenziale, aristæ firmæ erectopatulæ. Huc pertinet sec: BERTOL: *H. pubescens* Guss: Specim: mea ex cl: Auctore differunt tantum culmo erecto, geniculis macrioribus, spicis longioribus.

\* 4. *H. bulbosum* = L. sp: 125. = Spr: syst: I. 269. Bertol: fl: ital: I. p. 777. = Host: gram: austr: IV. p. 8. t. 13. *H. strictum* Desf: fl: atl: I. p. 113. t. 37. aliique (*Eur*: austr., *Afr*: bor: *Genuæ* in herbis frequens BERTOL: l. c. p. 778. *Sardin*: in sterilibus frequens MORIS st: sard: I. p. 51.). Peren: Radice tuberosa, erectiusculum elatum, folia late linearia pilosa basi amplexicauli- 2 - auriculata, spica elongata compressa, spicula intermedia sub-sessilis flosculo hermaphrodito longe aristato lateralibus pedicellatis masculis muticis, glumulæ valvæ setacæ brevi-aristatæ.

Obs: circa *Hordea* sativa.

Inter *Hordea* sativa omnia incertæ patriæ et annua primum locum tenet *H. vulgare* L. sp: 125. vern: *Ordi*; in hoc spiculæ omnes hermaphroditæ

quadrifariam positæ. Variat spicula flavescente vel nigra, semine libero vel corticato. = 2. *H. hexastichum* L. l. c., spiculis omnibus hermaphroditis sexfariam positis. = 3. *H. distichum* L. l. c., spica compresso-disticha, spiculis lateralibus masculis muticis, aristis hermaphroditæ adpressis. = 4. *H. Zeocrithon* L. l. c. a priori differens aristis spiculæ hermaphroditæ patentibus. Cons: insuper GAUD: fl: helv: I. p. 205. ad 208.

XXVIII. ELYMUS Lin: gen: ed: Schreb: n. 128. = Spr: syst: n. 331. = Lam: ill: t. 49. = *Hordei*, *Asprellæ* et *Gymnostichis* spec: nonnullæ quorund:

» *Glumula* 2-valvis involucriformis sub-multiflora,  
 » valvulis angustis aristatis vel muticis. *Perigon*: 2-  
 » valve, valvula exteriori majore mutica vel aristata.  
 » *Stam*: 3. *Styl*: 2. brevissimi stigmatibus plumosis.  
 » *Squamulæ* 2. lanceolatæ. *Caryops*: perigonio adhæ-  
 » rens (Spica continua articulata, spiculis geminatis  
 » vel pluribus, omnibus hermaphroditis). »

*Obs*: Genus a præcedente distinguendum præsertim spiculis non semper ternis constanter hermaphroditis, ac præsentia stylorum, constans 15. circiter stirpibus, quarum 5. tantum europææ, 1. ægyptiaca, ceteræ ex *Amer*: et *Asia* bor:, sæpius perennes raro annuæ.

\* 1. *E. europæus* = L. mant: I. p. 35. = Spr: syst: I. 327. Bertol: fl: ital: I. p. 773. = Host: gram: austr: I. p. 22. t. 28. Sub *Hordeo* All: n. 2276. Vern: *Ordi sèrvaj* (*Eur*: passim. *Pedem*: frequens ad oras sylvarum supra *la Perosa*, in dumetis montanis



*alpium Valdensem*, secus *Duriam* non infrequens ALL: l. c. Circa *carthusiam di Pesio* locis sylvaticis ALL: auct: p. 46. In sylvis vallis *Siccidæ* præsertim a *Scopello* frequens BIROLI fl: acon: I. p. 38.). Peren: Elatus erectiusculus, folia late linearia plana scabriuscula flaccida vaginis retrorsum hirsutis, spica elongata teretiusculo-compressa rigida, spiculæ ternæ sub-2-floræ, glumulæ valvulæ subulatæ basi læves aristulatæ, perigonii valvula exterior lineari-lanceolata longe aristata.

2. *E. crinitus* = Schreb: gram: II. p. 15. t. 24. f. 1. *Hordeum crinitum* Desf: *H. jubatum* DC. (*Eur: austr:; Tauria. Sardin: in pascuis Pula et Domos de Manis* MORIS st: sard: II. p. 11.). Differt a priori radice *annua*, statura undique *minori* præter aristas, spicis *brevioribus*, spiculis *geminis totis striatis longiusque* aristatis.

\*? 3. *E. arenarius* = L. sp: I. 467. = Spr: syst: I. 328. = Host: gram: austr: IV. t. 12. (*Eur: arenosis et maritimis. In arena ad maris litus* ALL: n. 2272.). Ann: Repens valde elatus, folia late linearia rigidissima pungentia scabra, spica elongata compressa erecta rigidissima, spiculæ adpressæ sub-ternæ sub-3-floræ pubescentes, glumulæ valvulæ flosculis longiores ciliatæ muticæ, perigonii valvula exterior calycinis latior magis pubescens pariter mutica. Fide ALL: refero hanc stirpem inter indigenas; illam habeo ex maritimis *Gullo-prov: non ex nostris litoribus. Cl: BERTOL: asserens stirpem hanc numquam repertam fuisse in Italia* dubitat cl: ALL: commutasse

plantam suam cum *Ammophila arundinacea* quam supra enumeravi sub *Psamma arenaria*.

XXIX. LOLIUM Lin: gen: ed: Schreb: n. 126. = Spr: syst: n. 329. = Lam: ill: t. 48.

» *Glumula* 1-valvis (2-valvis in spicula terminali)  
 » multiflora rachidis articulo paralella. *Perigon*: 2-  
 » valve, valvis inæqualibus, exteriore mutica vel  
 » brevi-aristata. *Stam*: 3. *Stigm*: 2. plumosa sub-  
 » sessilia. *Squamulæ* 2. inæqualiter 2-dentatæ. *Ca-*  
 » *ryops*: corticata a valvula perigonii interna (Spica  
 » composita, spiculis alternis rachidi articulatæ ad-  
 » pressis). »

*Obs*: Genus ex glumula 1-valvi et spicularum dispositione prima facie dignoscendum, constans 3-4. circiter veris stirpibus (8-g. sec: R. et S.) ann: vel peren: per orbem sparsis, fere omnibus etiam in *Eur*: nascentibus. Cl: DC. glumulæ duas valvas tribuit, quarum interior minima sæpius abortiva, numquam tamen nec rudimentum alterius valvulæ in tot specim: quæ possideo observare mihi datum fuit, excepta spicula suprema.

\* 1. *L. perenne* = L. sp: 122. = Spr: syst: I. 327. Bertol: fl: ital: I. p. 756. excl: *L. rigido* et *L. arvense* Re = Host: gram: austr: I. p. 20. t. 25. Lam: ill: t. 48. f. 1. Ic: taur: vol. I. t. 75. 77. f. 2. Vern: *Giewi dj præ* (*Eur.*, *Asia*, *Amer*: bor: *Pedem*: in pratis et secus vias vulgatissimum ALL: n. 2182. RE fl: segus: p. 14. et fl: tor: I. p. 83. BIROLI fl: acon: I. p. 37. Similibus locis *Genuæ*, *Sarzanzæ* etc.

BERTOL: l. c. p. 755. *Sardin*: ad vias MORIS st: sard: I. p. 51.). Peren: Cæspitosum culmo glabro altitudine varia, folia plus minus anguste linearia glabriuscula, spica elongata disticha sæpe curvula, spiculæ lanceolata compressæ, glumula flosculis brevior lineari-canaliculata obtusiuscula, flosculi arcte imbricati oblongo-lineares sub-mutici. Variat miris modis et speciatim spiculis 20-25-floris, superioribus aristatis (*L. multiflorum* Auctor:), ad agrorum versuras in agro *Taurinens*: inventum a D. PIOTTAZ RE fl: tor: I. p. 84. n. 3. = Culmo gracili, foliis angustioribus, spiculis exiguis 3-4-floris (*L. tenue* Auctor:), in comit: *Nicæens*: , *Liguriæ* et prov: *Canapiciensis* pascuis et dumetis saxosis ALL: n. 2186. = Glumula flosculos subæquante (*L. strictum* PRESL:), *Genuæ* lectum a BERTOL: var:  $\beta$  = Spica brevi dilatata complanata spiculis multifloris sub-imbricatis (*L. compositum* *L. cristatum* quorund:), secus *Sturam* prope *Venariam* RE app: III. p. 5. = Spica ramosula spiculis sæpe geminis ternisve (*L. ramosum* quorund:); habeo ex agro *Taurinens*: a sollertissimo D. BERTOLA cum aliis varr:

\* 2. *L. temulentum* = L. sp: 122. = Spr: syst: I. 327. Bertol: fl: ital: I. p. 760. = Host: gram: austr: I. p. 20. t. 26. Lam: ill: t. 48. f. 2. Ic: taur: vol. 1. t. 74. Vern: *Gieui* (*Eur*:, *N. Holl*: *Pedem*: inter segetes heu nimium frequens ALL: n. 2187. RE fl: segetus: p. 14. et fl: tor: I. p. 84. BIROLI fl: acon: I. p. 37. Similibus locis *Sarzanæ* BERTOL: l. c. p. 761. *Sardin*: MORIS st: sard: I. p. 51.). Differt præsertim a priori radice *annua*, culmo sæpius superne *scabro*, spiculis 3-7-floris, gluma flosculis *longiore late lan-*



*ceolata mucronulata*, flosculis ellipticis turgidioribus generatim aristatis. « Somnulentiam, soporem, delirium, convulsionem atque etiam mortem infert panis qui hujus stirpis grana cum tritico subacta in magna proportionem recipiat. » ALL: l. c.; de quo dubitant recentiores medici asserentes virescens in cerevisiam transire ac somnum tantum ac ebrietatem producere. Humida æstate et post inundationes *Triticum* in *Lolium* degenerare inter insomnia veteris ætatis adnumerandum. Etiam stirps hæc variat speciatim = culmo glabro, flosculis glumulam sub-æquantibus sub-muticis (*L. arvense* SM: SPR: syst: I. 327.); in arvis *Pedem:* frequens RE fl: tor: I. p. 83., perperam a cl: BERTOL: inter synon: *L. perennis* relatum, nam in planta RE radix annua et ceteri characteres plantæ SMITHII occurrunt. An huc pertineat *L. arvense* WITH: quod cl: MORIS st: sard: II. p. 11. distinguit a *L. temulento*, ignoro, plantam enim sardoam non vidi. = Arista abortiva in setulam albam flosculo breviorē mutata vel omnino nulla (*L. speciosum* GUSS.; *robustum* REICH.; *temulentum* var:  $\beta$  BERTOL:); *Sarzanæ*, *Genuæ* BERTOL: l. c. p. 762. *Sardin:* in arvis MORIS l. c. sub *L. specioso*.

\* 3. *L. rigidum* = Gaud: agr: helv: I. p. 334. et fl: helv: I. p. 355. = *L. temulentum* var: SPR: syst: I. 327. *L. perenne* var: Bertol: fl: ital: I. p. 756. = Ic: ? (*Augustæ Prætoricæ* ad vias apricas GAUD: II. cc. In collibus *Taurinens:* RE fl: tor: I. p. 84.). Speciem Gaudinianam satis distinctam a præcedentibus existimo et inter ipsas intermediam; differt enim a *L. perenni* radice annua, culmo rigido scaberrimo

inferne ramoso ; a temulento spica omnino mutica ,  
 spiculis paucifloris compresso-elongatis , flosculis glu-  
 mula longioribus et gracilioribus ; ab utraque habitu  
 rigidiori.

XXX. ROTBOLLIA Lin: fil: in am: acad: tom: X. p. 22.  
 et suppl: p. 13. = Spr: syst: n. 313. = Lam: ill:  
 t. 48. = *Lepturi*, *Monermæ*, *Lodiculariæ*, *Ophiuri*,  
*Hemarthriæ*, *Ægylopsidis*, *Panici*, *Stegesiæ*, *Xe-  
 rochloæ* et *Cymbachnes* spec: nonnullæ quorund:

» *Glumula* in spiculis lateralibus 1-2-valvis , in  
 » terminali 2-valvis , in omnibus flosculos superans,  
 » 1-2-flora, et tunc flosculus alter hermaphroditus  
 » alter masculus vel neuter. *Perianth*: 2-valve, val-  
 » vulis sub-æqualibus muticis. *Stam*: 3. *Stigm*: 2.  
 » plumosa. *Squamulæ* 2. minutæ truncatæ. *Caryops*:  
 » perigonio adnata rostrata. (Spicæ solitariae vel ag-  
 » gregatæ rachide alterne excavata flosculos innuptos  
 » in excavatione abscondente.). »

*Obs*: Genus valde artificiale et pro nonnullis stir-  
 pibus obscurum , hinc ab Auctoribus recentioribus et  
 præsertim a GÆRTN: filio et R. BR. in plura divisum  
 ex spicis simplicibus vel aggregatis , glumula 1- vel  
 2-valvi aliisque levissimis notis quæ melius retinendæ  
 pro generis sectionibus exemplo cl: SPR: Constat au-  
 tem 25. circiter stirpibus herbaceis per orbem spar-  
 sis , inter quas 4-5. tantum europææ.

\* 1. *R. incurvata* = L. fil: suppl: p. 114. = Spr:  
 syst: I. 299. Bertol: fl: ital: I. p. 764. = Host: gram:  
 austr: I. p. 18. t. 23. Sub *Ægylopside* L. sp: 1490.  
 Sub *Ophiuro* R. et S. syst: II. p. 797. (*Eur*: austr:,

*Afr:* hor: *Uneliæ* et *Nicææ* in agris mari proximis  
*ALL:* n. 2169. Prope *Genuam* in litore a *Sestri di Ponente*, *Ligur:* orient: ad *Clavarum*, et occidua ad *Albingaunum* *BERTOL:* l. c. p. 765. *Sardin:* in pascuis maritimis frequens *MORIS* st: sard: I. p. 52.). *Ann:* Cæspitosa decumbens ramosissima, folia anguste linearia glabriuscula, spica teres subulata cito incurvata, spiculæ alternæ 1-floræ intra excavationem rachidis occultæ, glumula 2-valvis operculiformis valvis lanceolato-linearibus 3-nerviis, perigonii valvulæ lanceolatae acuminatæ 1-nerves.

\* 2. *R. filiformis* = *Roth:* cat: II. p. 21. excl: *syn:* *Mont:* sec: *Bertol:* = *Spr:* syst: I. 299. *Bertol:* fl: ital: I. p. 766. = *Barr:* ic: t. 6. Sub *Ophiuro* *R.* et *S.* syst: II. p. 797. *R. erecta* *Lam:* ill: t. 48. f. 2. aliique (*Eur:* austr: *Ligur:* occid: in palustribus prope *Albingaunum* et in agro *Nicæens:* *BERTOL:* l. c. p. 767. In *Sardin:* pascuis *MORIS* st: sard: II. p. 12.). Vix differt a priori, cujus forsân var., spica graciliori compressiuscula sub-erecta, glumulæ valvulis obtusiusculis. In iisdem individuis sæpe occurrunt spicæ curvulæ vel erectæ sed semper compressiusculæ et graciliores quam in præcedenti; radicem perennem dicit *SPR:* forsân ex *ROTH:* qui asserit in viridario illam perennasse; sed plantæ spontaneæ sunt reapse annuæ.

3. *R. cylindrica* = *W.* sp: I. 464. *Bertol:* fl: ital: I. p. 768. (*Eur:* austr: *Sardin:* in arenis maritimis *Teulada* *MORIS* st: sard: I. p. 52.). Differt a præcedentibus statura generatim altiori, spicis subulatis semper erectis aut vix apice incurvis et præsertim glumula 1-valvi pugioniformi 6-nervi in spicula



terminali tantum 2-valvi, perigonii valvulis majoribus  
exteriore 5-nervi. Huc pertinet *R. subulata* SAVI alio-  
rumque.

XXXI. PSILURUS Trin: fund: agrost: p. 93. n. 1. =  
Spr: syst: n. 42. = *Asprellæ*, *Nardi*, *Rottbollia*  
et *Monermæ* spec: quorund: (*Monandr: dig: Spr:*).

» *Glunula* squamæformis minuta 1-2-valvis sub-  
» 2-flora flosculis multo brevior. *Perigon:* 2-valve,  
» valvula exteriore parum majore sæpius aristata.  
» *Stam:* 1. *Stigm:* 2. plumosa. *Squamulæ* 2. minimæ.  
» *Caryops:* corticata. »

*Obs:* Genus facie *Rottbollia*, sed characteribus al-  
latis et præsertim floribus *monandris* satis distinctum,  
constans unica stirpe sequenti.

\* 1. *Ps: nardoides* = Trin: l. c. = Spr: syst: I.  
21. Bertol: fl: ital: I. 771. = *Asperula nardiformis*  
Host: gram: austr: IV. p. 17. t. 29. *Nardus aristatus*  
L. sp: 78. aliq: *Rottbollia monandra* Cav: ic: I. p.  
27. n. 41. t. 39. f. 1. aliq: *Monerma monandra* R.  
et S. syst: II. p. 799. (*Eur: austr: In agro Nicæens:*  
secus macilenta pascua et ad vias locis declivibus  
non modo in *Ligur:* et *Monteferrato* sed etiam in  
collibus *Taurinensib:* et agro *Taurin:* ALL: n. 2130.  
sub *Nardo aristato*. In pascuis macilentis di *Foresto*  
RE fl: segus: p. 10. sub eodem et male ad *Triandr:*  
*monog:* Prope *la Molinetta* et in locis declivibus se-  
cus *Padum*, abunde etiam secus *Sturam* RE fl: tor: I.  
p. 84. sub *Rottbollia monandra*. In pascuis sterilibus  
vallis *Sessitis* et *Ossulæ* vulgaris BIROLI fl: acon: I.  
p. 19. sub *Nardo aristato*. Secus *Aconiam* et *Tici-*

*num*, in collibus cispadanis *di Casteggio* BIROLI mss: ined: *Sarzanæ* in muris vetustis sub arce *di Sarzanello* et in monte *Groppolo*, *Ligur*: orient: ad *Clavarum* in via quæ ducit ad *Capuccinos*, *Ligur*: occid: inter *Pegli* et *Voltri* BERTOL: l. c. p. 772.). Ann: Gracillima, folia setacea, culmi teretes cæspitosi tenuissimi, spica articulata scrobiculata solitaria longissima tenuissima maturitate fragillima; cetera ut in genere. Habeo etiam a D. Risso ex agro *Nicæens*: sub nomine *Rottbolliæ articulatae*.

XXXII. LAPPAGO Schreb: in Lin: gen: n. 131. = Spr: syst: n. 272. = *Cenchri*, *Tragi*, *Phalaridis* spec: quorund:

» *Glumula* 2-valvis 1-flora, valvulis valde inæqualibus, exteriori majore coriacea echinata, interiori minima membranacea nuda. *Perigon*: 2-valde resupinatum inter glumulæ valvulam majorem reconditum. *Stam*: 3. *Styl*: 2. breves, stigmatibus plumosis. *Squamulæ* 2. minutæ sub-fimbriatæ. *Caryops*: libera 2-rostrata (*Racemus* spiciformis ramis sub-3-locustiferis, spiculis lateralibus hermaphroditis, intermedia mascula vel media). »

*Obs*: Genus constans 2. stirpibus, quarum altera brasiliensis altera europæa.

\* 1. *L. racemosa* = W. sp: I. 484. = Spr: syst: I. 265. Bertol: fl: ital: I. p. 821. = Host: gram: austr: I. p. 28. t. 36. Sub *Cenchro* L. sp: 1487. Sub *Trago* All: n. 2181. aliq: Ic: taur: vol. 13. t. 11. f. 4. (*Eur*: austr: , *Caucaso*, *Indiis*. *Pedem*: in pascuis sterilibus et sabulosis ubique frequens ALL: l. c. RE

fl: segus: p. 82. sub *Cenchro*, et fl: tor: I. p. 88. sub *Lappagine*. *Sarzanæ* in alveis *Macræ*, *Genuæ* in muro' oppidi *Feritorem* versus, *Ligur:* occid: a *Pegli* secus viam publicam, *Nicæa* BERTOL: l. c. p. 822.). Ann: Humilis decumbens cæspitosa sub - radicans glauco-virens subinde purpurascens, folia latiuscula linearia acuminata brevia pilosula, racemus cylindraceus. Cetera ut in genere.

## Trib: V.

CHLORIDEÆ (Spiculæ sessiles in spicas secundas congestæ 1 - multi-floræ sursum imperfectæ. Styl: 2. *Glumæ* carinatae. Gen: 17. ex Bartl: p. 29. 30. quorum nonnulla obscura, fere omnia exotica, in *Pedemontio* nulla).

XXXIII. CHLORIS Sw: prodr: p. 25. = Spr: syst: 306. = P. de Beauv: agrost: p. 79. t. XVI. f. 6. = *Andropogonis*, *Agrostidis*, *Cynosuri*, *Eustachydis* spec: nonnullæ quorund: ( *Polyg: monoëc: W. Triandr: dygin: Spr:* ).

» Flores polygami. *Glumula* 2-valvis sub-2-flora  
 » flosculis brevior sub-mutica. *Perigon:* hermaphro-  
 » diti 2-valve, valvula exterior compresso-naviculari  
 » mutica vel aristata interiorem sub-reversam muti-  
 » cam fovens; masculi 1-2-valve clavatum sub-pe-  
 » dicellatum muticum vel aristatum. *Stam:* 3. *Stigm:*  
 » plumosa, *Squamulæ* 2. *Caryops:* libera nuda (*Spicæ*  
 » digitatæ). »



*Obs:* Genus constans 20. circiter stirpibus fere omnibus exoticis præsertim ex *Indiis* et *N. Holl.*, 1. tantum europæa, in sectiones divisis ex præsentia vel defectu aristarum et ex superficie perigonii nuda vel ciliata. Plures species possideo, inter quas sistit *Chl: pallida* = W. sp: IV. 926. *Andropogon provinciale* DC. fl: fr: n. 1689. ex Retz: (*Gallia austr.*). Ann: Cæspitosa erecta, folia latiuscule linearia plana glabriuscula vaginis ore pilosis, spicæ fasciculato-digittatæ plurimæ erectæ purpurascens, glumula aristata, perigonii valvula exterior (in flosculis perfectis) gibbosa dorso et apice ciliata. Specim: habeo etiam ex *Ægypt:* communicata a cl: SAVI, in quibus nullam cerno differentiam a gallicis.

### Trib: VI.

PANICEÆ (Spiculæ in spicas secundas congestæ vel paniculatæ 1-2-floræ deorsum imperfectæ. *Glumæ* non carinatæ a valvulis consistentia distinctæ. Gen: ex BARTL: 36., quorum nonnulla dubia, multa exotica).

XXXIV. PASPALUM Lin: gen: ed: Schreb: n. 81. = Spr: syst: n. 252. = Lam: ill: t. 43. = *Reimariæ*, *Ceresiæ*, *Milii*, *Eriochloæ*, *Digitariæ*, et *Helopi* spec: nonnullæ quorund:

- » *Glumula* 2-valvis membranacea 1-flora, valvula
- » exteriore respectu rachidis interius posita alteram
- » planiorem amplexante. *Perigon:* 2-valve cartilagi-

» neum, magnitudine glumulæ. *Squamulæ* 2. *Stam.* 3.  
 » *Styl:* 2. stigmatibus plumosis. *Caryops:* perigonio  
 » indurato acerata (*Flores* mutici spicati 1-laterales  
 » ad denticulos rachidis planiusculi). »

*Obs:* Genus, monente R. BR., affinitate *Panico* proximatum, habitu tamen diverso, constans 80. circiter stirpibus ex SPR., omnibus exoticis præsertim ex *Amer.*, nonnullis ex *Ind:* orient: et *N. Holl.*, herbaceis, spicis solitariis, geminis, alternis vel fasciculatis, ex quibus optimæ exsurgunt generis sectiones. Inter stirpes quas possideo, specialem mentionem merentur seqq.; utpote nondum descriptæ, quod sciam.

1. *P. Berterianum* = Balb: *P. glaucifolium* Berter: Ita in sched: specim: ex BALBIS: sine alia indicatione.

» *P. spicis* 2. altera pedunculata altera sessili, rachide planiuscula 2-nervi marginibus revolutis, floribus approximatis ovato-rotundatis glabris 1-nerviis mucronulatis, foliis latiuscule linearibus acuminatis glaucis vaginisque glaberrimis, culmo elato sub-adscendente simpliciusculo. » NOB: (Patria?).

= 2. *P. Fernandezianum* = Nob: *P. a conjugato diversum* Berter: in sched: (In pascuis collium ins: *Juan - Fernandez* ubi vulgo *Chepica* BERTER:). « *P.*

» *spicis* 2. erectis altera pedunculata altera sessili, rachide plana 5-nervi sub-undulata, floribus alternatim ad utramque rachidis marginem approximatis ovato-oblongis glabris 1-nerviis acutiusculis, foliis anguste lanceolatis acuminatis vaginisque longe ciliatis, culmo humili crassiusculo sub - ramoso. »

COLLA pl: rar: chil: fasc: ined: t. LIX. Differt a *P.*  
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*conjugato* BERG: præsertim spicis non reapse conjugatis, brevioribus erectis imo strictis nec horizontalibus, rachide ampliori, floribus duplo triplove majoribus glabris nec valva exteriori ciliata, foliis angustioribus manifeste et longe ciliatis. Vaginis purpurascentibus magis accedere videtur ad *P. ciliatum* LAM:; sed flosculis *ovato-oblongis* nec *orbiculatis* undique *glabris* nec basi *villosis* diversum.

XXXV. DIGITARIA Hall: hist: II. p. 244. = Spr: syst: n. 283. = P. de Beauv: agrost: p. 50. t. 10. f. 12. pro *Digitaria* et p. 37. t. 9. f. 1. pro *Cynodonte* = *Panici*, *Paspali*, *Syntherismæ*, *Cynodontis*, *Milii*, *Phalaridis*, *Agrostidis*, et *Cabreræ* spec: nonnullæ quorund:

» *Glumula* 2-3-valvis 1-flora, valvulis valde inæ-  
 » qualibus perigonio sub-adpressis, exteriori minima  
 » quandoque sub-inconspicua vel nulla. *Perigon*: 2-  
 » valve chartaceo - coriaceum, valvulis inæqualibus,  
 » exteriori concava, interiori plana, quandoque ru-  
 » dimentum pedicellatum sub-clavatum flosculi abor-  
 » tivi. *Stam*: 3. *Styl*: 2. stigmatibus aspergilliformi-  
 » bus. *Squamulæ* 2. minutæ truncatæ. *Caryops*: in-  
 » dusiata tenuiter sulcata vel (in *Cynodonte*?) lævis  
 » (Spicæ digitatæ; flores mutici). »

*Obs*: Auctoritate cl: SPR: aliorumque conjungendum duxi *Cynodon* RICH: cum *Digitaria*, genera jam ad *Panicum* L. pertinentia; habitus enim identicus, differentiae minimæ. Constat autem 27. circiter stirpibus fere omnibus exoticis, 3-4. tantum europæis, herba-  
 ceis, spicis geminis vel pluribus.



\* 1. *D. sanguinalis* = W. en: I. p. 92. = Spr: syst: I. 271. Bertol: fl: ital: I. p. 414. excl: var:  $\beta$  et  $\gamma$ . Sub *Panico* L. sp: 84. = Host: gram: austr: II. p. 14. t. 17. aliique. Sub *Paspalo* DC. *Syntherisma vulgare* Schrad: Ic: taur: vol. 24. t. 79. Vern: *Forceline*, *Parapieuwa* (*Eur*: passim. *Pedem*: in arvis ubique ALL: n. 2171. RE fl: segus: p. 10. sub *Panico* et fl: tor: I. p. 59. sub *Digitaria*. BIROLI fl: acon: I. p. 21. sub *Panico*. *Sarzane* in arenis *Macrae* BERTOL: l. c. p. 416. *Sardin*: in arvis MORIS st: sard: I. p. 51.). Ann: Statura varia erecta vel decumbens, folia linearia longiuscula sub-undulata sub-pilosa, spicæ 4-8. ac etiam plures filiformes erecto-patulæ quandoque 2-3. seriebus verticillatæ in plantis luxuriantibus, spiculæ minutæ oblongæ sub-imbricatæ geminæ altera sessili altera brevissime pedicellata, glumulæ valvulæ 3. exterior vix conspicua altera major vix margine ciliata nervis extimis glabris superior dimidio brevior.

\* 2. *D. ciliaris* = W. en: I. p. 93. = Spr: syst: I. 272. *D. sanguinalis* var:  $\beta$   $\times$  Bertol: fl: ital: I. p. 415. = Sub *Panico* Host: gram: austr: IV. p. 9. t. 15. aliique. Sub *Paspalo* DC. fl: fr: suppl: p. 250. Sub *Syntherisma* Schrad: (*Eur*: austr:, *Asia* min:, *Ind*: orient: et occid: In *Sabaud*: sec: LOISL: et DC. l. c. In agris vallis *Intrasca* prov: *Novariens*: BERTOL: l. c. p. 116. sub *D. sanguinali* pro var:  $\beta$ ). Differt a priori, cui valde proxima, statura generatim *minori*, spicis *parcioribus*, glumulæ valvula exteriore *magis* conspicua etsi minima, ac præsertim valvula media non solum margine sed etiam *nervis* evidenter et longe

ciliata. Var: x BERTOL: gaudet setis longis villo intersectis.

\* 3. *D. humifusa* = W. en: I. p. 93. ex Pers: = Spr: syst: I. 271. = Engl: bot: t. 2613. *D. glabra* Bertol: fl: ital: I. p. 417. ex R. et S. *D. filiformis* Koel: *Panicum glabrum* Gaud: fl: helv: I. p. 155. *Paspalum ambiguum* DC. fl: fr: n. 1505. *Syntherisma glabrum* Schrad: fl: germ: I. p. 163. t. 3. f. 6. (In cultis et incultis Eur: a Baltico ad Mediterra: et in Caucaso. Pedem: promiscue invenitur commixta cum *D. sanguinali*, speciatim secus viam di Superga abunde RE fl: tor: I. p. 59. et app: I. p. 10. Habeo Albæ ad muros lectam a BERTERO). A prioribus diversa statura valde minori, culmis *humifusis*, omnibus partibus *glabris*, spicis *sub - ternis* tantum, glumulæ valvulis media et suprema *sub - æqualibus* nervis *glabris* valleculeis *pubescentibus*. Nomen Pers: retinui uti antiquius pro *Digitaria* et melius indicans habitum stirpis.

\* 4. *D. stolonifera* = Schrad: fl: germ: I. p. 165. t. 3. f. 9. = Spr: syst: I. 271. *Panicum Dactylon* L. sp: 85. = Host: gram: austr: II. p. 15. t. 18. alii que. *Digitaria Dactylon* All: n. 2170. Ic: taur: vol. 13. t. 10. f. 2. alii que. *Paspalum Dactylon* DC. fl: fr: n. 1506. *Cynodon Dactylon* Bertol: fl: ital: I. p. 412. ex Pers: aliisque. Vern: Gramon uti *Triticum repens* (Eur: austr:, Caucaso, Amer: bor:, Afr: austr:, Ind: orient:, N. Holl: Pedem: in pascuis et agris passim ALL: l. c. RE fl: segus: p. 10. sub *Panico Dactylon* et fl: tor: I. p. 58. sub *Cynodonte Dactylon*. BIROLI fl: acon: I. p. 21. sub *Panico Dactylon*. Genuæ alla Foce sub muro oppidi, Sarzanæ alla Marinella BER-

TOL: l. c. p. 413. *Sardin*: in arenosis MORIS st: sard: I. p. 51.). Perenn: Valde repens et stolonifera ascendens, folia plus minus late linearia planiuscula disticha scaberrima, spicæ filiformes sub-senæ basi intus pilosæ, gluma 2-valvis valvulis parum inæqualibus perigonio glabro brevioribus. Planta in campis valde infesta habitu et usibus *Tritici repentis*.

XXXVI. PANICUM Lin: gen: ed: Schreb: n. 107. excl: variis stirpib: = Spr: syst: n. 323. = Lam: ill: t. 43. = *Airæ*, *Paspali*, *Holci*, *Nevrachnes*, *Milii*, *Monachnes*, *Sacchari*, *Isachnes*, *Agrostidis*, *Andropogonis*, *Streptostachydis*, et *Setariæ* spec: nonnullæ quorund:

» Flores polygami spicati racemosi vel paniculati.  
 » Glumula 2-valvis 2-flora, valvula altera plerumque minima aut obsoleta. Perigon: hermaphroditum  
 » 2-valve, masculi vel neutri 1-2-valve valvula utraque mutica (Char: ex SPR:). »

Obs: In tanta hujusce generis confusione ex Auctoribus, tutius censui simplicissimos characteres huic et duobus sequentibus a SPR: tributos transcribere. Qui plura desiderat consulat cl: GAUD: fl: helv: I. p. 149. et seqq: ubi tria hæc genera cum præcedenti conjungit in distinctas sectiones, nec non cl: BERTOL: fl: ital: I. p. 417. et seqq: ubi, admissis primum *Cynodonte* et *Digitaria*, cetera refert sub *Panico* in 4. sectiones diviso. Constat autem ex SPR: 206. stirpibus per orbem sparsis, fere omnibus exoticis, 5. tantum europæis, ex inflorescentia in spicam, racemum vel paniculam divisis, et ex paniculæ structura ac



flosculorum magnitudine, glabritie vel pubescentia sub-divisis. Perplures species possideo, sed in regionibus nostris seqq: tantum habemus.

\* 1. *P. repens* = L. sp: 87. = Bertol: fl: ital: I. p. 430. = Sibth: fl: gr: I. p. 45. t. 110. *P. coloratum* Spr: syst: I. 319. ex L.? (*Eur: austr: , Græcia, Ægypt: Ligur: occid: in litore del Ceriale BERTOL: l. c. Sardin: in uliginosis Capo-terra MORIS st: sard: I. p. 52.*). Perenn: Repens stoloniferum, culmi basi subbulbosi imbricato - squamosi, folia anguste linearia elongata scabriuscula vaginis inferioribus præsertim subhirsutis, panicula valde ramosa ramis plus minus diffusis alternis laxifloris, glumulæ valvulæ valde inæquales glabræ, perigonium masculi 2 - valve valvulis inæqualibus, antheræ coloratæ. Habeo ex *Ægypt: a cl: SAVI* specim: tum *P. colorati* cum *P. repentis*, nec video ita differre, ut species distinctæ admitti possint. Cons: tamen R. et S. syst: II. p. 431. 432. nn. 26. 27. nec non cl: BERTOL: qui differentiam *P. colorati* sistere monet in radice *annua* nec *stolonifera*.

\* 2. *P. capillare* = L. sp: 86. = Spr: syst: I. 320. Bertol: fl: ital: I. p. 432. = Host: gram: austr: IV. p. 10. (*Ind: orient: et occid: , Hungar: , Gallia merid: Nicæa eundo ad flumen le Var BALB: misc: bot: p. 8.*). Differt a priori radice *annua fibrosa* nec repente, foliis *late linearibus brevioribus pilosiusculis*, vaginis *calloso - hirtis*, panicula *capillari* ramis crebrioribus alterne *fasciculatis* paucifloris, flosculis *minoribus acuminatis*, perigonio masculi 1 - valvi.

\* 3. *P. miliaceum* = L. sp: 86. = Spr: syst: I. 318. = Host: gram: austr: II. t. 20. Vern: *Mej* (*Eur:*

orient: Nunc in *Eur:* med: et austr: ubi abunde colitur, fere spontaneum. In valle *Lepontia* et *Helvet: Insubrica* GAUD: fl: helv: I. p. 157.). Ann: Elatum culmis erectis compressiusculis, folia late lanceolata longissima margine scabra nervis orisque pilosis vaginis hirtis, panicula amplissima laxa demum nutans ramosissima ramis diffusis superne ramulosis ramulis paucifloris, valvulæ omnes mucronatæ. Variat seminibus albis luteis vel nigrescentibus. Colitur non tantum ad gallinarum aliorumque avium alimentum, sed etiam ad panem conficiendum pro rusticis, præsertim in provincia *Cuneensi*.

XXXVII. ORTHOPOGON R. Br: prodr: ed: 2. vol. I. p. 50. = Spr: syst: n. 322. = P. de Beauv: agrost: p. 53. t. XI. f. 3. sub *Oplismeno* = *Panici*, *Oplismeni*, *Andropogonis*, et *Echinocloæ* sp: nonnul: quorund:

» Flores polygami spicato-compositi. *Glumula* 2-  
 » valvis sub-æqualis 2-flora valvulis inæqualiter ar-  
 » stis. *Flosculi* dissimiles, exterior masculus vel  
 » neuter 1 - vel 2 - valvis, interior hermaphroditus  
 » chartaceus caryopsidem includens (Char: ex SPR:). »

*Obs:* Genus a *Panicis* spicatis vix differens glumulæ valvulis *sub-æqualibus*, exteriori longius interiori brevius *aristata* vel *mutica*, habitu tamen fere proprio, constans 20. circiter stirpibus exoticis præsertim ex utraque *Ind:* et *N. Holl:*, 2. tantum europæis.

\* 1. *O. undulatifolius* = Spr: syst: I. 306. = Sub *Panico* Bertol: fl: ital: I. p. 428. aliique. Sub *Oplismeno* R. et S. syst: II. p. 482. *Panicum hirtellum* All: n. 2180. = Host: gram: austr: III. p. 36. t. 52.

aliique non L. *P. Burmanni* Balb: misc: bot: p. 8. aliique (*Ital: , Gallia , Helvet: Pedem:* ad radices montium in sylvis umbrosis ALL: l. c. Frequens in sylvis *Condoviensib:* secus *Duriam* RE fl: segus: p. 10. sub *Panico Burmanni*. In locis umbrosis sub-humidis ad sylvas et speciatim supra *la Molinetta* RE fl: tor: II. p. 152. sub *P. undulatifolio*. In umbrosis collium præsertim *di Romagnano* BIROLI fl: acon: I. p. 21. sub *P. Burmanni*, et ad oras sylvarum *Ossulæ* ibid: sub *P. hirtello*. In valle *Augustæ Prætoricæ* GAUD: fl: helv: I. p. 159. ). Ann: Decumbens inferne repens, folia ovato-lanceolata acuminata undulata scabriuscula vaginis pilosissimis, spica elongata interrupta, spiculæ vel racemuli fasciculati secus rachidem hirsutissimam pauciflori, glumulæ aristæ crassiusculæ flexuosæ glutinosæ. Quidquid sit de differentia inter *P. hirsutum* Host: et *P. Burmanni* ARD:, certum est plantas sub hisce nominibus a Botanicis nostratibus relatas ad eandem stirpem pertinere ceu fassus est BIROLI ipse in mss: ined: Aliud dicendum de *P. hirtello* L. quod crescit in *Indiis* nec in *Eur:* Cons: R. et S. et GAUD: II. cc.

\* 2. *O. Crus Galli* = Spr: syst: I. 307. = Sub *Panico* Bertol: fl: ital: I. p. 423. ex L. sp: 83. aliisque = Host: gram: austr: II. p. 15. t. 19. *P. Crus Corvi* L. sp: 84. Sub *Echinochloa* R. et S. syst: II. p. 478. ex P. de Beauv: Vern: *Erba costa , Pabi , Pabion* (*Eur: passim , Asia , Afr: , Amer: , N. Holl: Pedem:* in arvis ubique abunde ALL: n. 2179. RE fl: segus: p. 10. et fl: tor: II. p. 152. In fossis oryzarum et ipsis oryxis infestus ubi spica pedalis evadit



BIROLI fl: acon: I. p. 20. omnes sub *Panico*. *Ligur:* occid: inter *Pegli* et *Sestri di Ponente*, *Sarzanæ* BERTOL: l. c. p. 425. In *Sardin:* arvis MORIS st: sard: I. p. 51.). Ann: Cæspitosus nec repens inferne crassiusculus plus minus elatus, folia late linearia elongata margine scabra ceterum glabriuscula vaginis striatis glabris ligula nulla ejus loco macula flavescent, spica racemosa quandoque altissima racemis alternis et alternatim racemulosis superioribus magis approximatis sub-sparsis racemulis sub-multifloris, spiculæ sub-secundæ, flosculus modo plus minus longe aristatus modo muticus. Mire variat pro statione; in locis humidis pinguibusque fit etiam 3 - 4 - pedalis. *P. Crus Corvi* L. non differt nisi statura generatim minori, spica nutante, racemis secundis, rachide 3-gona nec 5-gona uti in *P. Crus Galli* valvulis sub-muticis; sed in planta tam polymorpha parum habendæ leves istæ notæ.

XXXVIII. SETARIA P. de Beauv: agrost: p. 51. t. XIII. f. 3. = Spr: syst: n. 321. = *Panici* et *Penniseti* spec: nonnullæ quorund:

» *Flores* polygami paniculato-spicati. *Spiculæ* in-  
 » volucro 2 - vel multi - seto suffultæ. *Glumula* 2 -  
 » valvis 2 - flora, valvula exteriore minima. *Perigon:*  
 » hermaphroditi 2 - valve, valvula inferiore superio-  
 » rem involucrante, neutri 1-2-valvi (Char: ex SPR:). »

*Obs:* Involucrum setaceum sub singula locusta distinguit præsertim hoc genus a duobus præcedentibus eique habitum fere proprium tribuit; constat autem

20. circiter stirpibus fere omnibus exoticis, 4. tantum europæis.

\* 1. *S. verticillata* = R. et S. syst: II. p. 488. = Spr: syst: I. 304. Sub *Panico* L. sp: 82. Bertol: fl: ital: I. p. 418. = Host: gram: austr: II. p. 11. t. 13. Lam: ill: t. 43. f. 1. aliique. Vern: *Panissa*, *Panestrel*, *Panestre*, *Pabiet* etc. (*Eur.*, *Asia*, *Amer*: bor: *Pedem*: ad vias et limites agrorum in arvis passim ALL: n. 2176. RE fl: segus: p. 10. et fl: tor: II. p. 151. In aggeribus et fossis oryzarum infestissima ubi variat spicis longissimis deorsum secundis, setis etiam longitudine pollicis ita ut distincta species adpareat BIROLI fl: acon: I. p. 20. *Genuæ* BERTOL: I. c. p. 419. omnes sub *Panico*. *Sardin*: in arvis MORIS st: sard: I. p. 52.). Ann: Cæspitosa adscendens vel erecta, folia late linearia elongata acuminata superne scaberrima inferne vaginæque glabræ, vaginæ loco brevis series pilorum, panicula spicata cylindrica ramis sub - verticillatis plus minus distantibus paucivel multi - locustiferis, spiculæ parvulæ secus ramos semi-ovoideæ turgidæ, involucrum sub-2-setum setis retrorsum aculeatis plerumque flosculis longioribus, unde panicula scaberrima evadit et vestibus admotis facillime adhæret, flosculi neutri 2-valves. Variat spiculis purpurascentibus, setis brevioribus indeque panicula minus adhærente.

\* 2. *S. viridis* = R. et S. syst: II. p. 488. = Spr: syst: I. 304. Sub *Panico* L. sp: 83. Bertol: fl: ital: I. p. 420. = Host: gram: austr: II. p. 12. t. 14. aliique. Vern: *Baraval* uti sequens (*Eur.*, *Asia*, *Amer*: bor:

*Pedem*: in pratis feracibus atque ad limites agrorum  
 ALL: n. 2178. RE fl: segus: p. 10. et fl: tor: II. p.  
 151. BIROLI fl: acon: I. p. 20. Copiosissima *Sarzanæ*  
 in arvis vineis glareis, *Genuæ* ad fossas sub *Albaro*  
 BERTOL: l. c. p. 421. omnes sub *Panico*). Differt a  
 priori speciatim panicula continua ramis sub - æqua-  
 libus valde approximatis brevibus sparsis numquam  
 verticillatis, setis generatim longioribus viridibus sur-  
 sum nec retrorsum aculeolatis, ideo hæ numquam  
 corporibus adhærent, flosculus hermaphroditus pun-  
 ctato - scaber.

\* 3. *S. glauca* = R. et S. syst: II. p. 490. = Spr:  
 syst: I. 304. Sub *Panico* L. sp: 83. Bertol: fl: ital: I.  
 p. 421. = Host: gram: austr: II. p. 13. t. 16. aliique.  
 (*Eur.*, *Asia*, *Afr.*, *Amer.*, *N. Holl.*: *Pedem*: in arvis  
 frequens ALL: n. 2177. RE fl: tor: II. p. 151. BIROLI  
 fl: acon: I. p. 20. Passim in *Ligur*: BERTOL: l. c. p.  
 422. omnes sub *Panico*). Paniculæ structura magis  
 accedit ad priorem quam ad *verticillatam*, sed differt  
 tota glaucescens ac præsentia involucri *multiseti*, setis  
 patulis vix ac ne vix quidem sursum minutissime acu-  
 leatis *luteis* aut *fulvis*, spiculis seminibusque *duplo*  
*majoribus*, flosculis hermaphroditis *transverse rugosis*.  
 In cultis ubi post tritici messes inter stipulas luxu-  
 riat hæc species, semina ope appositi cribri leguntur  
 ad gallinis, coturnicibus (quæ prædicta loca præfe-  
 runt) aliisque avibus cibum præstandum *Panico mi-*  
*liaceo* succedaneum. Ad eundem usum parce colitur  
 data opera penes nos *S. italica* (*Panicum italicum* L.)  
*Ind*: incola et in *Eur*: austr: spontanea sec: R. et S.  
 certe non in *Italia*, vulgo nota sub nomine *Panj*. Cl:



GAUD: fl: helv: I. p. 153. tradit eam esse vulgarem ad vias vallis *Leponticæ* et alibi in *Helvet: Insubrica*. Cultura orgyalis evadit, panicula valde crassa pedali et ultra.

XXXIX. MILIUM Lin: gen: ed: Schreb: n. 110. = Spr: syst: n. 260. = *Agrostidis*, *Paspali*, *Eriochloæ*, *Piptatheri*, *Urachnes*, *Eriocomæ*, *Stipæ*, et *Avenæ* spec: nonnullæ quorund:

» *Glumula* 2-valvis 1-flora, valvulis æqualibus her-  
 » baceis acutis muticis. *Perigon*: glumula inclusum  
 » 2 - valve valvulis demum cartilagineis dorso com-  
 » pressis enerviis inæqualibus, externa dorso aristata  
 » vel mutica. *Stam*: 3. *Styl*: 2. stigmatib: plumosis.  
 » *Squamulæ* 2. integræ glabræ. *Caryops*: perigonio  
 » indurato inclusa (panicula). »

*Obs*: Genus pro nonnullis stirpibus obscurum, af-  
 finitate forsitan melius ad *Agrostideas* referendum ni  
 glumulæ et perianthii consistentia differret, con-  
 stans ex Spr: 22. stirpibus, inter quas 4. tantum  
 europææ.

\* 1. *M. effusum* = L. sp: 90. = Spr: syst: I. 250.  
 Bertol: fl: ital: I. p. 383. = Host: gram: austr: III.  
 p. 16. t. 22. Sub *Agrostide* DC. fl: fr: n. 1518. (*Eur*:  
 passim. *Pedem*: in sylvis opacis ALL: n. 2153. RE fl:  
 segus: p. 11. In collium *Taurinens*: sylvis RE fl: tor:  
 I. p. 60. In sylvis *Ticini* præsertim *Campolati* BIROLI  
 fl: acon: I. p. 23. In sylvis alpinis montis *Gottro* in  
*Ligur*: orient: BERTOL: l. c. p. 384.). Perenn: Stolo-  
 niferum glabriusculum, folia lanceolato-linearia præ-  
 longa acuminata, ligula oblonga erosa, panicula laxa

ramis diffusis sub - verticillatis filiformibus inferne nudis superne sub-racemosis ramulis paucifloris, spiculæ parvulæ ovatæ turgidiusculæ muticæ. Variat culmo valde elatiori spiculis confertioribus (*M. effusum* var:  $\beta$  GAUD: fl: helv: l. p. 176. *M. confertum* L. sp: 90.).

2. *M. vernale* = M. B. fl: taur: cauc: l. p. 53. *M. scabrum* Bertol: fl: ital: l. p. 384. *M. confertum* Guss: non L. sec: Bertol: (*Tauria*, *Caucaso*, *Calabr.*, *Sicil.* *Sardin.*: centrali in pascuis montanis MORIS st: sard: II. p. 11.). Differt a priori radice *annua*, culmo tenuiori *scabro*, foliis *angustioribus brevioribusque*, ligula *obtusa*, panícula *breviori* ramis *strictis*. Habeo ex cl: Guss: exemplar sub nomine *M. scabri* quod a *vernali* omnino differt spica strictissima, ramis brevissimis imbricatis; an alia species? An ad *Gastridii* genus amandanda? Cons: cl: Auctorem in prodr: fl: sic: l. p. 54.

\* 3. *M. cærulescens* = Pers: ench: l. p. 74. = Spr: syst: l. 251. Bertol: fl: ital: l. p. 388. = Desf: fl: atl: l. p. 66. t. 12. *M. paradoxum* All: n. 2154. non L. retento solo synon: Micheli. *Agrostis cærulescens* DC. fl: fr: suppl: p. 250. Sub *Piptathero* P. de Beauv: agrost: p. 5. t. 5. f. 10. Sub *Urachne* Trin: (*Eur.*: austr:, *Afr.*: bor: In agro *Nicæens*: ad rupes mari proximas ALL: l. c. *Ligur*: occid: a *Capo S. Spirito*, *Ligur*: orient: in monte *di Portofino* BERTOL: l. c. p. 389. *Sardin*: ad sepes MORIS st: sard: l. p. 51.). Perenn: Sub - cæspitosum glabrum glaucescens, folia anguste linearia sub-convoluta elongata vagina obtusulacera, panícula laxa ramis plerumque solitariis al-

ternis remotis apice ramulosis, spiculæ elongatæ acuminatæ purpureo-cærulescentes, perigon: valvula externa basi barbata versus apicem brevi - aristata. *M. paradoxum* L. quod rarum in *Ital:* quodque in regionibus nostris desideramus est quidem *cærulescenti* affine, sed differt præsertim panicula *nutante*, vagina *breviori*, perigonii valvula externa tota *pilosa* ac *longissime* aristata.

\* 4. *M. multiflorum* = W. en: I. p. 94. = Spr: syst: I. 251. Bertol: fl: ital: I. p. 386. = *M. arundinaceum* Sibth: fl: græc: I. p. 50. t. 66. *Agrostis miliacea* All: n. 2156. ex L. sp: 91. Host: gram: austr: III. p. 31. t. 45. aliique. *Piptatherum multiflorum* R. et S. *Urachne parviflora* Trin: (*Eur: austr: Circa Nicæam*, circa *Garessio* et *Ormea* ALL: l. c. *Sarzanæ* in colle *di Sarzanello* prope dirutum castrum hujus nominis, *Ligur: orient:*, *Segesta Tiguliorum*, *Ligur: occid:* in promontorio *delle Mele*. Ad sepes *Sardin:* frequens MORIS st: sard: III. p. 12.). Perenn: Stoloniferum basi sub-frutescens ibique ramosum glabriusculum, folia anguste linearia acuminata vaginis brevibus ligula brevissima sub - retusa, panicula valde elongata ramis remote semi-verticillatis versus apicem ramulosis, ramulis sæpissime multifloris, spiculæ parvæ ovato - turgidiusculæ, perigonii valvula exterior sæpius arista valvula ipsa longiore prædita. *M. frutescens* SIEB:, quod possideo e plantis cultis in h. Ripul: a BALBIS: missis, non videtur differre nisi culmis firmioribus longo tractu suffrutescentibus et ramosis, ac paniculæ ramis parcioribus ac sæpe solitariis.



## Trib: VII.

SACCHARINÆ (Spiculæ paniculatæ vel spicatæ rachide articulata geminæ altera sessili altera pedicellata 1 - 2 - flora deorsum imperfectæ.

*Glumæ* non carinatæ. Gen: ex BARTL: 26., quorum plurima obscura et exotica).

XL. ANDROPOGON Lin: gen: ed: Schreb: n. 1566. excl: variis stirpib: = Spr: syst: n. 297. = Lam: ill: t. 840. = *Heteropogonis*, *Holci*, et *Naphidis* spec: nonnullæ quorund: (*Polygam: monoëc: L.*, *Triandr: digyn: Spr:*).

» *Flores* polygami spicati vel paniculati. HERMAPHROD:  
 » sessilis. *Glumula* chartacea 2-valvis 2-flora, valvulis  
 » sub - æqualibus muticis, flosculo altero neutro 1 -  
 » valvi aristato, altero perfecto 2-valvi valvulis inæ-  
 » qualibus exteriore majore mutica interiore brevior  
 » aristata; in flosculo perfecto *stam:* 3. *Styl:* 2. stig-  
 » matibus plumosis. MASC: pedicellatus. *Glumula* char-  
 » tacea 2-valvis 1-flora, valvulis sub-inæqualibus mu-  
 » ticis. *Perigon:* inclusum 1 - 2 - valve membranaceo-  
 » hyalinum ciliatum muticum. *Stam:* 3. »

*Obs:* Genus fructificatione et habitu satis naturale valde numerosum (spec: 64. ex SPR:) pro nonnullis stirpibus tamen dubium. Herbæ perennes per orbem sparsæ, 3. tantum europææ, culmis generatim erectis fistulosis sæpe ramosis, inflorescentia varia sc: vel in paniculam vel in spicas solitarias geminas ternasve digitatas paniculatas ex quibus optimæ eruun-

tur sectiones. Circa varios characteres huic generi tributos ab Auctoribus cons: præsertim R. et S. syst: II. p. 52. et TRIN: Androp: gen: in mem: de l'acad: des sc: Petersb: sect: IV. tom: II. livr: 2. p. 239.

\* 1. *A. Allionii* = W. sp: IV. 904. = Spr: syst: I. 283. excl: syn: R. Br: = *A. contortum* All: n. 2277. t. 91. f. 4. non L. *Heteropogon Allionii* Bertol: fl: ital: I. p. 460. aliique. *H. glaber* Pers:, P. de Beauv: agrost: p. 15. t. 23. f. 8. (*Eur: austr: Pedem: supra Eporediam* et in valle *Segusina* locis rupestribus passim ALL: l. c. c. descr: Ad calidas rupes *di Mompantero* et *di Foresto* RE fl: segus: p. 82. sub *A. contorto* excl: syn: L. *Liguria* occid: *al Ceriale* et *a Finale* BERTOL: l. c. p. 461. Habui etiam ex *Nicæa* a cl: RE). Perenn: Cæspitosus erectus inferne compressus crassus superne teretiusculus ramosus glaucescens, folia linearia carinata scabriuscula, spica terminalis solitaria secundi-flora compressiuscula imbricata, flores masculi glaberrimi mutici, fœminei hirsuti aristis longissimis spiraliter contortis infra articulum villosis supra scabris. Verus *A. contortus* L. non crescit in *Eur:* et differt spiculis minus distichis, aristis minus villosis, et præcipue valvula exteriori florum masculorum pilis densis longissimis undique obsessa.

\* 2. *A. hirtus* = W. sp: IV. 917. = Spr: syst: I. 284. = Host: gram: austr: IV. p. 1. t. 1. *A. hirtum* L. sp: 1482. Bertol: fl: ital: I. p. 468. Ic: taur: vol. 22. t. 103. (*Eur: austr: Frequens Uneliæ* et in comit: *Nicæens:* locis aridis et saxosis ALL: n. 2280. *Ligur:* occid: *a Pegli*, *Ligur:* orient: inter *Genuam* et *Recco* BERTOL: l. c. p. 469. *Sardin:* in collinis ari-

dis MORIS st: sard: I. p. 49.). Differt præsertim a priori tota planta *debiliore* undique exceptis vaginis *pilosa*, spicis *geminis* terminalibus *axillaribusque* brevioribus, flosculis *remotiusculis* omnibus rachideque *piloso-hirtis*.

\* 3. *A. Ischæmum* = L. sp: 1483.? = Spr: syst: I. 286. = Host: gram: austr: II. p. 3. t. 2. Ic: taur: vol. 1. t. 85. *A. angustifolium* Bertol: fl: ital: I. p. 470. ex Sm: Vern: *Corniola*, *Cornagiora* (*Eur: med: Pedem: vulgaris* in locis sterilibus ALL: n. 2281. RE fl: segus: p. 82. et fl: tor: II. p. 150. In pascuis aridis *Ticini* et ericetis *Burgimani* non frequens BIRROLI fl: acon: II. p. 140. *Genuæ* in montibus inter *lo Sperone* et *il Diamante*, *Sarzanæ* ad amnem *Macram* et in collibus BERTOL: l. c. p. 471.). Peren: Cæspitosus elatus graciliusculus superne puberulus ibique sub-ramosus, folia angustiora quam in præcedentibus sub-pilosa vaginis glabris, ligulæ loco densa series pilorum, spicæ digitatæ sub-octonæ lineares erecto-patentes, spiculæ secus rachidem hirsutam remotiusculæ oblongo-lineares sub basi barbatae, glumulæ muticæ valvula exterior sericeo-villosa interior glabra, perigonii valvulæ glabræ, arista articulata flosculo longiore. Cl: BERTOL: l. c. p. 472. in obs: primus monuit, *A. Ischæmum* L. ex borealibus plagis forsan a nostro differre, ideoque prætulit nomen a Sm: impositum.



*Species nova.*

4. *A. altissimus* = Nob: *A. . . n. sp.* BERTER: in sched: (*Chili*, *Valparaiso* in pascuis saxosis præruptis maritimis loco dicto *la Plaga ancha*). « *A. pa-*  
 » *nicula terminali composita coarctata ovata erecta*,  
 » *ramis spicatis geminatis alternis approximatis im-*  
 » *bricato-multifloris*, *spiculis lineari-lanceolatis basi*  
 » *penicillatis*, *valvulis omnibus glabris*, *arista tortili*  
 » *flosculis triplo longiore*, *culmo crasso altissimo va-*  
 » *ginisque glabris*, *ligula decomposita*, *laciniis fili-*  
 » *formibus pilis commixtis*, *foliis late linearibus pla-*  
 » *nis striatis scabriusculis.* » Nob: Planta 2-3-pedalis  
 et ultra basi fere digiti minimi crassitie; ex habitu  
 videtur perennis et cæspitosa, panicula palmaris ra-  
 mosissima ex violaceo argenteo. Vid: COLLA pl: rar:  
 chil: fasc: ined: t. LX.

XLI. POLLINIA Spr: pugill: II. p. 10. et syst: n. 298. =  
*Andropogonis*, *Chrysopogonis*, *Cynosuri*, *Sacchari*,  
*Perotidis*, *Apludæ*, *Pogonatheri*, *Homoplitidis*,  
*Diectomidis*, *Anthraxonis* et *Holci* spec: nonnullæ  
 quorund:

» *Flores polygami spicati vel paniculati. Glumula*  
 » *2-valvis 2-flora sub-aristata. Perigon: hermaphro-*  
 » *diti et masculi conforme aristatum, illud pedicel-*  
 » *latum hoc sessile. Rudimentum tertii flosculi 1-*  
 » *valve (Charact: ex Spr:).* »

*Obs:* Genus prorsus artificiale, præcedenti habitu  
 simile et in ejus dispendium a cl: Spr: creatum e 16.  
 stirpibus, quarum 2. tantum europææ.

\* 1. *P. distachya* = Spr: pug: II. p. 12. et syst: I. 288. = Bertol: fl: ital: I. p. 463. Sub *Andropogone* L. sp: 1481. = Host: gram: austr: III. p. 2. t. 2. aliique. Sub *Apluda* Presl: (*Eur: austr: Ubique ad rupes et in saxis comit: Nicæens: ALL: n. 2279. sub Andropogone. Genuæ in collibus al Lagazzo, Ligur: occid: BERTOL: l. c. p. 464.*). Peren: Sub-cæspitosa adscendens vel erecta, folia anguste linearia longissima scabriuscula vagina apice villosa ciliata ligula sphacelata, spicæ terminales geminæ lineares plerumque longitudine inæquales glabræ, spiculæ oblongæ sub-imbricatæ, glumulæ et perigonii valvulæ interiores aristatæ in hermaphrodito, glumulæ valvula exterior sola aristata in masculo.

\* 2. *P. Gryllus* = Spr: pug: II. p. 10. et syst: I. 289. = Bertol: fl: ital: I. p. 465. Sub *Andropogone* L. sp: 1480. = Host: gram: austr: II. p. 1. t. 1. aliique. Sub *Chrysopogone* Trin: Sub *Apluda* Presl: Vern: *Trbi* (*Eur: med: et austr: Pedem: in pratis non irriguis præsertim ad radices montium positis ALL: n. 2278. Passim in pratis macilentis et in pascuis RE fl: segus: p. 82. et fl: tor: II. p. 150. In pascuis et in pratis siccis etiam circa Novar: vulgaris BIROLI fl: acon: II. p. 139. omnes sub Andropogone. Genuæ al Lagazzo, in collibus di Pegli Ligur: occid:, in Lomellina a Confienza BERTOL: l. c. p. 466.*). Inflorescentia statim distinguitur a priori, panicula laxa ampla ramis elongatis filiformibus sub-verticillatis inferne nudis apice incrassatis sæpius 3-locustiferis, spiculæ elongatæ basi pilis aureis involucreatæ ceterum glabriusculæ fusco-purpurascens, arista valvulæ in-

terioris perigonii in flore hermaphrodito duplo triplove longior quam in præcedenti articulate contorta. Variat spiculis pallidis et fere aureis ut involucra; hanc raram var: habeo a cl: BIROLI unice lectam in pratis dell' *Arbogna* ubi typus communis est; non confundenda tamen cum *P. pallida* R. et *S. N. Holl:* incola, in qua spiculæ sunt basi nudæ nec ullo modo barbatae.

XLII. *SORGHUM* Pers: ench: I. p. 101. = Spr: syst: n. 303. = *Holci*, *Andropogonis*, *Dochnæ* et *Durræ* spec: nonnullæ quorund:

» *Flores* polygami paniculati. *Glumula* coriaceo-  
 » cartilaginea 2-valvis 2-flora valvulis muticis. *Perigon:* inclusum, hermaphroditi 2-valve valvula  
 » interiore aristata, neutri 1-valve muticum. MASC:  
 » *Glumula* 1-flora pedicellata. *Perigon:* 2-valve muticum. »

*Obs:* Genus habitu satis distinctum, sc: culmis crassis intus fartis, foliis latis arundinaceis, caryopside compresso-turgida, albumine niveo-farinaceo ad pultem et panem conficiendum inserviente. Constat autem 9-10. stirpibus exoticis præsertim ex *Indiis* et *C. B. S.* una tantum etiam europæa.

\* 1. *S. halepense* = Pers: ench: I. p. 101. = Spr: syst: I. 291. Bertol: fl: ital: I. p. 473. Sub *Holco* L. sp: 1485. = Host: gram: austr: I. p. 1. t. 1. aliique. Sub *Andropogone* W. sp: IV. 932. Sibth: fl: græc: I. p. 52. t. 68. aliique. *A. arundinaceum* All: n. 2282. aliique (*Eur:* austr:, *Asia* min:, *Ind:* occid: *Pedem:* in arvis argillaceis collium *Taurinens:* et circa *Lu-*



*cengo*, in vineis *di Borgomasino* et in pratis siccis *Ciliani* atque *Montisferrati* frequens ALL: l. c. In arvis argillaceis collium circa *Lucengo* et ad pratorum marginem retro *il Parco* BALB: fl: taur: p. 169. Etiam prope *Altessanum* RE fl: tor: II. p. 153. *Sarzanæ* et *Genuæ* in collibus BERTOL: l. c. p. 475.). Peren: Radice tuberosa crassa repente, culmi cæspitosi elati crassi farcti glabri, folia lanceolata longissima setaceo-acuminata striata margine et carina scabra vaginis glabris, ligula brevi truncata albo et rubro maculata, panicula pyramidata laxiuscula ramis sub-verticillatis flexuosis inferne nudis superne ramulosis ramulis pauci-locustiferis, spiculæ oblongæ compresso-turgidiunculæ mucronulatæ purpurascens villosiusculæ, arista tortilis sæpius valvula longior quandoque obsoleta vel nulla.

2. *S. vulgare* = Pers: ench: I. p. 101. Vern: *Melia d' ramasse* (Ind: orient:). Differt præsertim a priori radice annua, statura undique duplo triplove majore, panicula coarctata oblonga ramulis pluri-locustiferis, spiculis obovatis, arista generatim breviori. Colitur in *Pedem*: alibique præsertim ad margines agrorum *Zææ Mays* tum ad panem pultemque conficiendam pro rusticis, cum ad gallinaceas alendas, ac præcipue ad scopas parandas. Variat seminibus nigris vel nigrescentibus (*S. nigrum*, *nigricans*, *nigerrimum* R. et *S. syst*: II. p. 837.).

XLIII. SACCHARUM Lin: gen: ed: Schreb: n. 104. excl:  
 2. stirpib: = Spr: syst: n. 296. = Lam: ill: t. 40.  
 = *Imperatæ*, *Andropogonis*, *Panici*, *Erianthi*,  
*Ripidii*, *Dimericæ* et *Laguri* spec: nonnullæ quorund:

» Flores paniculati generatim hermaphroditi sub-  
 » inde raro cum masculo vel neutro commixti. *Glu-*  
 » *mula* 2-valvis 1-2-flora coriacea villis sericeis longis  
 » involucrata. *Perigon*: 2-valve valvulis inæqualibus,  
 » exteriore majore mutica vel aristata. *Stam*: 2-3.  
 » *Styl*: 2. stigmatibus plumosis. *Squamulæ* 2. trun-  
 » catæ fimbriatæ. »

*Obs*: Genus habitu magis, et præsertim villis lon-  
 gissimis quibus flosculi obducuntur, facilius ab affi-  
 nibus distinguendum quam fructificationis organis  
 quandoque dissimilibus in eadem specie ac semper  
 exiguis et fugacissimis maxime in plantis siccis. Con-  
 stat autem 30. circiter stirpibus, inter quas 3-4.  
 tantum europææ. Occurrit sæpe in calidariis nostris  
 curiositatis gratia *S. officinarum* = L. b. Cliff: p. 26.  
 (*Indiis*) ubi difficillime floret; hoc præstat majorem  
 purioremque quantitatem substantiæ saccharinæ quam  
 ceteræ plantæ. Indigenam habemus tantum speciem  
 sequent:

\* 1. *S. cylindricum* = Lam: dict: I. p. 588. et  
 ill: t. 40. f. 2. = Spr: syst: I. 282. Bertol: fl: ital:  
 I. p. 332. = *Imperata arundinacea* Cyrill: pl: rar:  
 neap: fasc: II. p. 26. t. 11. aliique. *Lagurus cylin-*  
*dricus* All: n. 2175. ex L. (*Eur*: med: et austr: In  
 agro *Nicæens*: ALL: I. c. *Sardin*: in maritimis *Quartu*,  
*Oristano* MORIS st: sard: I. p. 52.). Peren: Late re-

pens stoloniferum cæspitosum glaberrimum, folia linearia sub-convoluta vaginis longe productis suprema sub-spathacea apice loco folii mucrone terminata, ligula brevis truncata lacero-ciliata, panicula spiciformis cylindracea mollissime sericea, seta nivea flosculis omnibus hermaphroditis diandris muticis triplo longiore, stigmata purpurea.

XLIV. *ANTHOXANTHUM* Lin: gen: ed: Schreb: n. 58. excl:  
2. stirpib: = Spr: syst: n. 136. = Lam: ill: t. 23.  
(*Diandr: dygin: L.*).

» *Glumula* 2-valvis 3-flora flosculis longior. *Floscul:*  
» 2. laterales neutri 1-valves alio basi infra medium  
» arista tortili plicata, alio versus apicem arista recta,  
» intermedius perfectus lateralibus brevior 2-valvis  
» muticus, in quo *stam:* 2. *Styl:* basi simplex stig-  
» matibus 2. longissimis plumosis. *Caryops:* libera  
» sulcata. »

*Obs:* Genus constans 4. stirpibus europæis valde inter se se similibus, generatim gracilibus, quarum 2. tantum occurrunt in regionibus nostris. Dissentiunt Auctores circa numerum florum in glumula, aliis flores steriles pro squamis tantum habentibus, aliis pro veris floribus abortivis; genus certe anomalum. Cons: R. BR: prodr: ed: 2. p. 65. in obs: ad *Hierocloam* GAUD: fl: helv: I. p. 61. in obs:, et BERTOL: fl: ital: I. p. 324.

\* 1. *A. odoratum* = L. sp: 40. = Spr: syst: I. 124. Bertol: fl: ital: I. p. 324. = Host: gram: austr: I. p. 5. t. 5. Ic: taur: vol. 1. t. 64. (*Eur:* passim. *Pedem:* nihil vulgatius ALL: n. 1128. RE fl: tor: I.



p. 38. BIROLI fl: acon: I. p. 10. Copiosum *Sarzanæ* et *Genuæ* BERTOL: l. c. p. 325. In *Sardin:* pascuis MORIS st: sard: I. p. 49.). Peren: Gracile sub-hirsutum præsertim ad vaginarum oras, folia linearia plana, racemus spiciformis compositus compressiusculus ex viridi flavescens subinde violaceus varians longitudine et crassitie, spiculæ oblongæ approximatae vel quandoque inferiores remotiusculæ ut spica interrupta adpareat. Var: hæc occurrit in graminosis prope *Tendam* (ALL: l. c.). Plantæ recenter exsiccatae gratum odorem spargunt et fœno communicant.

2. *A. gracile* = Bivon: manip: I. t. 1. f. 1. (*Sicil: Sardin:* septentr: in pascuis MORIS st: sard: II. p. 11.). Differt a priori præsertim radice *annua*, habitu generatim *graciliori*, racemo *simplici*, arista *majore*, glumula *duplo longiore*; illa in *A. odorato* glumulam non excedit.

### Trib: VIII.

PHALARIDEÆ (Spiculæ in paniculam spicatam congestæ 1-2-floræ sursum imperfectæ; *glumæ* carinatae consistentia a valvulis distincta; *stam:*

3. Gen: ex Bartl: 12., nonnulla obscura).

XIV. CRYPSIS Schreb: in Lin: gen: n. 1710. = Spr: syst: n. 269. = Lam: ill: t. 42. = *Heleochloæ*, *Anthoxanthi*, *Phalaridis*, *Phlei*, *Spartinae*, *Schoeni* et *Antitrage* spec: nonnullæ quorund:

» *Glumula* 2-valvis 1-flora perigonio brevior, valvulis compressis muticis sub-inæqualibus. *Perigon:*

» 2-valve , valvulis inæqualibus muticis. *Stam:* 2-3.

» *Caryops:* libera. »

*Obs:* Genus constans ex Spr: 7. stirpibus parum dissimilibus humilibus , paniculis contractis sub-spicatis involucratis , spiculis minutis. Herbæ europææ , asiaticæ vel americanæ.

\* 1. *Cr: schoenoides* = W. en: I. p. 85. = Spr: syst: I. 264. Bertol: fl: ital: I. p. 365. = Lam: ill: t. 42. f. 1. Sub *Phleo* L. sp: 88. Jacq: ic: rar: I. p. 2. t. 15. Sub *Heleochloa* Host: gram: austr: I. p. 23. t. 30. (*Eur: austr: , Pensylvan: In agro Nicæens: ALL: n. 2137. sub Phleo. Sardin: in udis Capo-terra MORIS st: sard: I. p. 51.*) Ann: Elatiuscula compressa ramosa , folia anguste linearia planiuscula scabriuscula , panicula densissima spicæformis ovato-cylindracea sessilis sub-diphyлло-involucrata , flosculi triandri.

\* 2. *Cr: aculeata* = W. sp: I. 158. = Spr: syst: I. 265. Bertol: fl: ital: I. p. 363. = Host: gram: austr: I. p. 24. t. 31. Lam: ill: t. 42. f. 2. Sub *Schæno* L. sp: 63. Sub *Agrostide* All: n. 2164. (*Eur: austr: In agro Nicæens: ALL: l. c. Pedem: in sabulosis secus Padum eundo versus la Madonna del Pilone et prope portam Padi in locis inundatis RE fl: tor: I. p. 56. Sardin: in pascuis maritimis Capo-terra MORIS st: sard: I. p. 50.*). Præcedenti omnibus partibus valde *humilior* ; differt insuper præsertim panicula *hemisphærica* sessili 2-4-phylla involucrata , foliolis convoluto-subulatis sero *pungentibus* , flosculis *diandris*.

\* 3. *Cr: alopecuroides* = W. en: I. p. 86. = Spr:

syst: I. 264. Bertol: fl: ital: I. p. 367. = Sub *Phleo* Pill: et Mitter: it: p. 147. t. 16. sec: Bertol: Sub *Heleochloa* Host: gram: austr: I. p. 23. t. 29. (*Eur: austr: Pedem: circa laculum di Ternavasio* BALB: misc: alt: p. 7. Ex *Albæ* humentibus habeo a BERTER: Ad semitas prope *Eremum* in locis humidiusculis ad finem autumnii copiosa RE fl: tor: I. p. 56.). Magis accedit ad *Cr: schænoideam* quam ad *aculeatam* paniculæ structura et flosculis triandris, sed differt culmis *teretibus simplicibus*, panicula *graciliore longiore* basi *attenuata*, involucro constanter 1-*phylllo* ac valde longiore.

XLVI. ALOPECURUS Lin: gen: ed: Schreb: n. 102. excl: paucis stirpib: = Spr: syst: n. 249. excl: *A. Gerardi* n. 16. = Lam: ill: t. 42. = *Phalaridis* et *Tozzettiæ* spec: nonnullæ quorund:

» *Glumula* 2-valvis 1-flora perigonium sub-æquans,  
 » valvulis compressis muticis sub-æqualibus inferne  
 » connatis aut liberis. *Perigon:* 1-valve infra me-  
 » dium dorso aristatum. *Stam:* 3. *Styl:* 2. sub-con-  
 » nati. *Caryops:* libera (*Panicula* racemosa vel spi-  
 » cata). »

*Obs:* Perigonium 1-valve aristatum, involucri defectus et habitus robustior distinguunt præsertim a præcedenti hocce genus constans ex SPR: stirpibus 18. quarum media circiter pars europæa.

\* 1. *A. agrestis* = L. sp: 89. = Spr: syst: I. 240. Bertol: fl: ital: I. p. 370. = Host: gram: austr: III. p. 9. t. 12. Ic: taur: vol. 1. t. 65. Vern: *Erba pandè*, *Gouratina*, *Coa d' Volp* uli ceteræ species (*Eur: et*



*Asia* passim. *Pedem*: ad limites agrorum ALL: n. 2146. Nihil in arvis vulgatus RE fl: segus: p. 11. et fl: tor: I. p. 57. In agris et pratis BIROLI fl: acon: I. p. 22. *Sarzanæ* BERTOL: l. c. p. 371.). Ann: Cæspitosus debilis elatiusculus scabriusculus, folia late linearia brevia vaginis strictis suprema parum inflata ligula brevi 2-fida, panicula spicæformis cylindrica elongata gracilis, spiculæ oblongo-ovatæ acutæ, glumulæ valvulæ a basi fere ad medium connatæ glabriusculæ, arista perigonio duplo longior. Variat perigonio multico.

\* 2. *A. utriculatus* = Pers: ench: I. p. 80. = Spr: syst: I. 240. Bertol: fl: ital: I. p. 375. = Sibth: fl: græc: I. p. 47. t. 63. Sub *Phalaride* L. sp: 80. Host: gram: austr: III. p. 6. t. 7. Ic: taur: vol. 22. t. 84. aliique. *Tozzettia pratensis* Savi (*Eur*: austr: *Pedem*: in pratis collinis atque ad vias non infrequens, etiam circa *Taurinum*, in pratis *di Borgomasino* frequens ALL: n. 2141. sub *Phalaride*. In pratis *di Vanchia* et ad fossarum margines secus *il Corso del Valentino* prope *Padum* alibique frequens RE fl: tor: I. p. 58. sub *Alopecuro*. In pratis siccis vulgaris BIROLI fl: acon: I. p. 20. sub *Phalaride*. In pratis *Sarzanæ* copiosus BERTOL: l. c. p. 376. *Sardin*: in pascuis et in arvis MORIS st: sard: I. p. 49.). Differt a priori præsertim vagina folii supremi *utriculoso-inflata* clavæformi, panicula *ovata* crassiuscula  *breviori*, valvulis glumulæ dorso medio *callosis scabris*, arista *longiore*.

\* 3. *A. pratensis* = L. sp: 88. = Spr: syst: I. 240. Bertol: fl: ital: I. p. 369. = Host: gram: austr:

II. p. 24. t. 31. (*Eur.*, *Asia*, *Amer.* bor: *Pedem.* in pratis montanis et collinis sub-humidis frequens ALL: n. 2145. RE fl: segus: p. 11. In pratis humidis speciatim circa *la Mandria* RE fl: tor: I. p. 57. BIROLI fl: acon: I. p. 22. In *Sardin.* pascuis MORIS si: sard: I. p. 49.). Peren: Simpliciusculus erectus generatim firmior et elatior quam præcedentes, folia longiora vagina suprema vix inflata, panicula fere ut in *A. agresti*, sed duplo crassior obtusa, glumulæ valvulæ basi tantum connatæ pubescentes acutæ.

\* 4. *A. geniculatus* = L. sp: 89. = Spr: syst: I. 240. Bertol: fl: ital: I. p. 373. = Host: gram: austr: II. p. 24. t. 32. *A. fulvus* Sm: engl: fl: I. p. 83. Fl: dan: t. 1804. aliique. *A. bulbosus* Hoffm: non L. (*Eur.* et *Amer.* bor: locis inundatis. *Pedem.* secus flumina aquæductus et fossas aquarum ALL: n. 2147. RE fl: segus: p. 11. In aquis stagnantibus *di Pianezza* prope *la Praglia*, *Druent*, *Sangone* et *Stupinixii* RE fl: tor: I. p. 57. In pratis frequens BIROLI fl: acon: I. p. 23.). Differt a priori culmis evidentius *geniculatis procumbentibus* ad nodos inferiores præcipue *radicantibus*, panicula *graciliori* magis *elongata* æquali, glumulæ valvulis *obtusis*, aristis *exsertis* vel *inclusis*. Cll: SPR: et BERTOL: *A. geniculatum* L. cum *fulvo* SM: conjungunt; reapse non differunt nisi arista in hoc valvulis brevior, longe exserta in *geniculato*. Cons: tamen GAUD: fl: helv: I. p. 144. ubi utramque speciem admittens alias minoris adhuc valoris differentias describit. Variat quoque radice bulbosa (*A. bulbosus* HOFFM: non L.).

\* 5. *A. bulbosus* = L. sp: 11. non Hoffm: =

Spr: syst: I. 240. Bertol: fl: ital: I. p. 372. = Engl: bot: t. 1249. Barr: ic: 699. f. 1. (*Anglia*, *Gallia*, *Ital*: In pratis udis *Ligurice* ALL: n. 2144. *Sarzanæ* ad fossas secus viam *Romanam* BERTOL: l. c. Ex aquosis *Albensib*: habeo a BERTER: *Sardin*: in pascuis maritimis udis MORIS st: sard: I. p. 49.). Valde priori affinis, sed radice canstanter *bulbosa*, culmis *erectis* nec *radicantibus*, glumulæ valvulis *acutis* et basi *liberis*, arista perigonio *triplo* longiore satis distinctus. Ad quam stirpem referendus sit *A. ciliatus* ALL: n. 2150. nescio. Vid: supra obs: ad *Koeleriam phleoidæam* n. 1.

XLVII. PHLEUM Lin: gen: ed: Schreb: n. 128. = Spr: syst: n. 250. = Lam: ill: t. 42. = *Phalaridis*, *Crypsidri*, *Chilochloes* et *Achnodontonis* spec: nonnullæ quorund:

» *Glumula* 2-valvis 2-flora, valvis æqualibus muticis truncatis mucronulatis vel acuminatis, quandoque rudimentum flosculi alterius. *Perigon*: 2-valve inclusum, valvulis inæqualibus muticis (*Panicula* spicata). Cetera fere *Alopecuri*. »

*Obs*: Genus habitu, inflorescentia præsertim, præcedenti valde affine, sub-divisum ex glumulæ structura sc: vel apice truncata mucronulata (in *Phleo* P. DE BEAUV.), vel acuta, sine vel cum mucrone (in *Achnodontone* P. DE BEAUV.), vel demum ex præsentia rudimenti pedicilliformis alterius flosculi (in *Chilochloa* P. DE BEAUV.); constans 12. circiter stirpibus fere omnibus europæis.



A *Phleum*.

\* 1. *Phl: pratense* = L. sp: 87. = Spr: syst: I. 241. Bertol: fl: ital: I. p. 347. = Host: gram: austr: III. p. 7. t. 9. Ic: taur: vol. 1. t. 68. et vol. 22. t. 87. *Phl: Bertolonii* DC. cat: h. monsp: p. 132. non Guss: nec Moris. Scheuthz: agrost: p. 60. n. 1. t. 2. f. 5. *Phl: nodosum* L. sp: 88. Fl: dan: t. 380. aliique. *Phl: Bertolonii* var:  $\beta$  Guss:, Moris. *Phl: bulbosum* Host: gram: austr: IV. p. 12. t. 21. Vern: *Coa d' rat* uti ceteræ species (*Eur: et Asia* passim. *Pedem: abunde* in pratis ALL: n. 2132. pro *Phl: pratense*, in pascuis et ad vias in montanis n. 2135. p. 233. pro *Phl: nodoso*. RE fl: segus: p. 11. In pratis prope *la Mandria* ac *Eremi Taurinensis* RE fl: tor: I. p. 54. n. 1. pro *Phl: pratense*; in locis aridis *Stupinixii* et prope *S. Egidium* ante cascale *del Boja* dictum ibid: n. 2. pro *Phl: nodoso*. In pratis siccis *dell' Arbogna* BIROLI fl: acon: I. p. 22. n. 1. pro *Phl: pratense*. In pascuis alpinis et montanis ibid: n. 4. pro *Phl: nodoso*. *Sarzanæ* in *M. Darne*, *Ligur: orient: alle cento Croci* BERTOL: l. c. p. 349. *Sardin: in pratis* MORIS st: sard: I. p. 52. pro *Phl: pratensi*; in pascuis humidis maritimis idem III. p. 12. pro *Phl: Bertolonii*). Peren: Ad collum sæpe plus minus evidenter bulbosum vel nodosum statura varia, folia linearia plana scabra basi sæpius obliqua, panicula spiciformis cylindræa densissima gracilis plus minus elongata, spiculæ minutæ brevissime pedicellatæ, glumæ valvulæ carina plus minus evidenter ciliatæ mu-

crone ipsis brevior. Hic , auctoritate etiam recentiorum Botanicorum , tres supra citatas species conjunxi ; differunt enim tantummodo sc: *Phl: Bertolonii* ciliis carinalibus glumulæ parvioribus et brevioribus, et *Phl: nodosum* radice crassius bulbosa, culmo humiliori ad nodos refracto, panicula breviori; quæ omnia forsân tribuenda naturæ soli, generatim enim hoc occurrit frequentius in montanis vel in arvis locisque sterilibus.

\* 2. *Phl: alpinum* = L. sp: 88. = Spr: syst: I. 241. Bertol: fl: ital: I. p. 350. = Host: gram: austr: III. p. 8. t. 10. Ic: taur: vol. 13. t. 22. f. 4. 6. *Phl: commutatum* Gaud: ? (*Eur: alpib: Pedem: in pascuis et pratis editioribus alpium non infrequens ALL: n. 2134. Re fl: segus: p. 11. In pratis subalpinis et illis circa Novariam alle Mura vulgare BIROLI fl: acon: I. p. 22. Ligur: orient: in monte Gottro et in pratis di S. Stefano d'Aveto BERTOL: l. c. p. 351. ). Differt a priori præsertim radice *repenti* nunquam *bulbosa*, panicula generatim *breviore crassiore sub-ovata*, mucrone *pubescente* glumulæ valvulas æquante. *Phl: commutatum* quod hic jungitur a SPR: et BERTOL: quodque invenitur penes nos in *M. Blanc* sec: DC. fl: fr: suppl: p. 248. , mihi ignotum. Cons: GAUD: fl: helv: I. p. 166. Huc referendum *Phl: geniculatum* BELLARD: app: p. 6. et Re fl: segus: p. 11. ceu jam dubitarunt R. et S. syst: II. p. 380. in obs: Specim: mea ex *M. Cenisio* perfecte quadrant cum *Phl: alpino*. Cl: BERTOL: nullibi refert hocce synon: ; excludendum tamen ab obs: R. et S. *Phl: Bellardi* quod sec: BERTOL: pertinet ad *Phl: tenue* n. 4. :*

B *Achnodonton*.

\* 3. *Phl: Michelii* = All: n. 2138. et auct: p. 38. = Spr: syst: I. 241. Bertol: fl: ital: I. p. 358. = Engl: bot: t. 2265. *Phl: phalarideum* Vill: dauph: II. p. 60. t. 2. f. 3. *Phalaris alpina* Host: gram: austr: II. p. 26. t. 35. aliique (*Eur: austr: Pedem: in pascuis montanis di Borgomasino, locis siccis di Borgo d'Ales* ALL: n. 2138.; copiose supra *Ormea, S. Martin di Lantosca* et in montibus *di Piossasco, Caselette* etc. ALL: auct: p. 38. In *M. Musinè* RE fl: segus: p. 11. Secus *Cerundam* inter *Venariam* et *Altessanum* et in vineis *di Caselette* RE fl: tor: I. p. 55. In monte *Caprione* ad amnem *Macram* prope *Sarzanam*, in vertice *M. Fasce* prope *Genuam*, in *M. Comarella* agri *Clavarensis* in *Ligur: orient:*, in siccis sylvaticis *di Pegli Ligur: occid:*, in montanis *Nicæensib:* BERTOL: l. c. p. 359.). Peren: Elatiusculum cæspitosum, folia anguste linearia longissima erecta, panicula sub-spicata elongata cylindracea laxe lobata basi sæpe interrupta, spiculæ oblongæ compressæ longius pedicellatæ quam in præcedentibus, glumulæ valvulæ lanceolatæ acuminatæ mucronatæ mucrone scabro ipsis multo brevior, carina dense ciliata.

\* 4. *Phl: tenue* = Schrad: fl: germ: I. p. 191. = Spr: syst: I. 241. Bertol: fl: ital: I. p. 361. *Phl: Bellardi* W. *Phalaris bulbosa* Bellard: app: p. 7. non Cav: = *Ph: tenuis* Host: gram: austr: II. p. 27. t. 36. (*Eur: austr: Pedem: unice prope Savilianum* in



area herbida ruris dicti *del Follone* BELLARD: l. c.). Planta mihi obscura ex specim: donatis a cl: BELLARDI, et aliquantulum recedens a descr: BERTOL: l. c. Culmi filiformes erecti simplicissimi glaberrimi, folia pauca anguste linearia breviter vaginisque longioribus glabra, ligula brevissima truncata, panicula cylindræa vix semi-pollicaris, spiculæ ovatæ compressæ, glumulæ valvulæ ovatæ læves brevissime mucronulatæ. Certe nostra planta non pertinet ad *Phl: geniculatum* seu ad *Phl: Bellardi*, cum quo confusa fuit a R. et S. Vid: supra n. 2.

\* 5. *Phl: Gerardi* = All: n. 2135. p. 232. = Spr: syst: I. 241. Bertol: fl: ital: I. p. 353. = Jacq: ic: rar: II. p. 9. t. 301. Sub *Alopecuro* Vill: dauph: II. p. 66. t. 2. f. 6. et Spr: l. c. n. 16. (*Eur: med: , Ital: Pedem: in summis alpium pratis M. Cenisii, Vinadii, della Vanuesa* ALL: l. c. BALBIS misc: bot: p. 8. RE fl: segus: p. 11. In pratis alpium *di Formazza* BIROLI fl: acon: I. p. 22.). Peren: Radice crassa sub-tuberosa erectiusculum simpliciusculum glabrum, folia linearia planiuscula parca breviter, ligula brevissima truncato-erosa, panicula brevis sub-ovata obtusa, glumulæ valvulæ lanceolatæ oblique truncatæ, perigonii valvula exterior infra medium seta aristæformi ipsa breviori instructa. Præsentia hujusce aristulæ suaderet, speciem hanc ad *Alopecurum* trahendam esse, ni ceteri characteres cum *Phleo* convenirent; ex hoc forsitan error SPR: qui eandem plantam ibi enumeravit sub *Alopecuro* et sub *Phleo*, ceu probat syn: ALL: ab ipso utrique tributum. Male etiam ALL: auct: VOL. VI.

p. 38. delendum dixit suum *Phl: Gerardi* et ad *alpinum* amandandum; specim: mea lecta locis ab ALL: indicatis in flora pertinent certe ad *Phl: Gerardi* ab *alpino* diversum characteribus supra allatis.

### C *Chilochloa*.

\* 6. *Phl: Boehmeri* = Wib: Werthem: p. 125. = Spr: syst: I. 242. Bertol: fl: ital: I. p. 356. *Phalaris phleoides* L. sp: 80. = Host: gram: austr: II. p. 26. t. 34. aliique (*Eur: passim. Pedem: ad limites agrorum et vias ALL: n. 2140. sub Phalaride phleoidea. Ad oras sylvarum Stupinixii et prope Venariam RE fl: tor: I. p. 55. In alpibus di Alagna et Grassoney BIROLI mss: ined: sub Chilochloa. Secus Ticinum in aridis NOCC: et BALB: fl: ticin: I. p. 30. et 319. Peren: Cæspitosum elatiusculum, folia latiuscula linearia breviuscula glauca scabra longissime vaginata ligula brevissima truncata, panicula elongata cylindrica densissime purpurascens, spiculæ oblongæ, glumulæ valvulæ oblique truncatæ acuminato-mucronatæ mucrone scabro ipsis brevior. Variat glumulæ valvulis carina ciliatis vel nudiusculis scabris, et longitudine paniculæ sec: GAUD: fl: helv: I. p. 169. sub *Phl: phalaroides*).*

\* 7. *Phl: asperum* = Vill: dauph: II. p. 61. n. 2. t. 2. f. 4. = Spr: syst: I. 242. Bertol: fl: ital: I. p. 355. *Phl: viride* ALL: n. 2133. et auct: p. 38. = *Phalaris aspera* Host: gram: austr: II. p. 28. t. 37. (*Anglia, German:, Gallia, Ital: Pedem: ad sepes agrorum locis sterilibus prope Moncalieri ALL: l. c.*

In arvis arenosis RE fl: segus: p. 11. sub *Phl: viridi*. Ad agrorum margines in locis arenosis totius agri *Taurinens*: RE fl: tor: I. p. 55. In prov: *Aconiensi* non frequens, a *Cerano* vulgare BIROLI fl: acon: I. p. 19. sub *Phalaride* et mss: ined: sub *Chilochloa*. *Sarzanæ* in hortis BERTOL: l. c. p. 356. Habeo ex prov: *Albensi* a BERTERO). Ann: Valde cæspitosum parum elatum undique læte viride, folia lanceolata acuminata brevia aspera ligula elongata acuta, panicula ut in priori sed viridis et generatim brevior, glumulæ valvulæ obovato-cuneatæ compresso-turgidæ undique scabræ brevissime mucronulatæ; tota planta odorem *Anthoxanthi odorati* spargit.

\* 8. *Phl: arenarium* = L. sp: 88. = Spr: syst: I. 360. Bertol: fl: ital: I. p. 360. = Fl: dan: t. 915. Sub *Phalaride* W. sp: I. 328. aliiq ( *Eur: maritimis*. Locis maritimis arenosis et macilentis ALL: n. 2136. et auct: p. 38. ). Ann: Humile glabrum, folia linearia brevia vaginis laxis ligula albo-membranacea obtusiuscula, panicula brevis obverse oblonga densissima albo-virens, glumulæ valvulæ lanceolatæ carina remota ciliata mucrone brevissimo, perigonium brevius quam in ceteris stirpibus. Habeo eandem plantam ex hb: BELLARDI nomine *Phl: maritimi* SUFFR:

XLVIII. PHALARIS Lin: gen: ed: Schreb: n. 106. excl: nonnullis stirpib: = Spr: syst: n. 285. = Lam: ill: t. 42. = *Arundinis*, *Baldingeræ* et *Digraphidis* spec: paucae quorund:

» *Glumula* 2-valvis 1-flora compressa, valvulis æqualibus navicularibus aut carinatis sub-muticis.



» *Perigon*: 2 - valve inclusum, valvulis inæqualibus  
 » coriaceis sub-muticis. *Rudimentum* alterius flosculi  
 » appendiciforme vel 2-valve. *Caryops*: corticata (Pa-  
 » nicula spicata raro racemosa). »

*Obs*: Genus præcedenti proximum, a quo distinguitur præsertim glumulæ structura, constans 12. circiter stirpibus ex *Eur*: austr., *Asia*, *Afr*: bor: et *C. B. S.* Perigonium dicitur a quibusdam 3-4-valve ob præsentiam flosculi imperfecti (Gluma corollina, nunc simplex 2-valvis, nunc duplex 3-4-valvis BERTOL: Corolla duplex 4-paleacea GAUD:).

\* 1. *Ph*: *canariensis* = L. sp: 79. = Spr: syst: I. 272. Bertol: fl: ital: I. p. 337. = Host: gram: austr: II. p. 28. t. 38. Ic: taur: vol. 1. t. 67. (Ins: *Canar.*, *Gallo-prov*: In comit: *Nicæens*: ALL: n. 2139. *Genuæ* in herbidis *all' Aquasola* BERTOL: l. c. p. 338. *Sardin*: inter segetes MORIS st: sard: II. p. 11.?). Ann: Simpliciuscula erectiuscula, folia latiuscula linearia acuminata scabra vaginis glabris sub-inflatis ligula elongata sub-acuta albo-membranacea, panicula ovata turgida, spiculæ late obovatæ imbricatæ fasciis lunatis viridibus pictæ, glumula obovata apice integerrima, carina late alata, flosculi rudimentum 2-valve glabrum. Colitur sub nomine vern: *Scajola* ad aviculos, præsertim passeris canarios, quibus semina gratissima, nutriendos.

\*? 2. *Ph*: *nitida* = Presl: cyper: et gram: sic: p. 26. = Bertol: fl: ital: I. p. 338. = *Ph*: *brachystachis* Trin: sp: gram: fasc: 7. c. ic: (*Agro Bononiens.*, *Roman.*, *Sicil*: In maritimis *Nicæensib*: BERTOL: l. c. p. 339.). Fide cl: BERTOL: refero hanc stirpem, quam

numquam vidi, inter indigenas. Ex descr: non videtur differre a præcedenti, nisi glumula *oblonga*, carina *angustius* alata, perigonii valvulis exterioribus *minoribus glabris* nec *ciliatis*. Huc pertinet sec: eundem Auctorem *Ph: canariensis* MORIS. Cl: SPR: eam amandat ad *Ph: cærulescentem* DESF., quod merito improbat BERTOL:

\* 3. *Ph: nodosa* = L. mant: 357. = Spr: syst: I. 273. Bertol: fl: ital: I. p. 339. = Sibth: fl: græc: I. p. 41. t. 56. *Ph: bulbosa* DC. fl: fr: suppl: p. 249. excl: syn. Cav: (*Caucaso orient: , Græcia , Eur: austr: Ex agro Nicæens: misit Rizzo ad BALBIS: sub nomine Ph: bulbosæ* BALB: misc: alt: p. 5. *Genuæ ad canallem supra il Lagazzo loco siccio , Ligur: occid: a Pegli* BERTOL: l. c. p. 340. *Sardin: inter segetes MORIS st: sard: I. p. 52. sub Ph: bulbosa* excl: syn: Cav:). Peren: Basi plus minus tuberulis superimpositis crassa nodosa, folia anguste lanceolata acuminata rigida scabriuscula longe vaginata ligula late ovata, panicula cylindracea crassiuscula elongata, glumula lanceolata acuta carina anguste alata integra continuata, perigonium 3-valve villosum. Planta sub nomine *Ph: bulbosæ* sæpe confusa cum duabus seqq:

4. *Ph: aquatica* = L. am: acad: IV. p. 264. Bertol: fl: ital: I. p. 341. non Ait: *Ph: cærulescens* Desf: atl: I. p. 56. aliique excl: in Spr: syn: Presl: *Ph: bulbosa* Cav: ic: I. p. 46. t. 64. non Auctor: supra cit: (*Eur: austr: , Ital: merid: Sardin: in pascuis Campidano di Cagliari* MORIS st: sard: II. p. 11.). Differt a priori, cui valde affinis, præsertim foliis *angustioribus* minusque *rigidis*, panicula potius *ovato-*

*oblonga quam cylindræa*, glumulæ valvulis *mucronatis* carina *late ovata eroso-dentata* nec tam *continua*, ac demum perigonio 2-valvi *glabriusculo*.

\* 5. *Ph: minor* = Retz: obs: III. p. 8. = Bertol: fl: ital: I. p. 342. = Trin: spec: gram: fasc: 7. c. ic: aliique. *Ph: bulbosa* Desf: non Auct: supra cit: *Ph: aquatica* Spr: syst: I. 272. Host: gram: austr: II. p. 29. t. 39. aliique non L. (*Eur: austr: Afr: bor: In agro Nicæens: DC. fl: fr: suppl: p. 249. sub Ph: aquatica. Genuæ in herbidis all' Aquasola, Sarzanæ inter sata in collibus di Rigazzo BERTOL: l. c. In Sardin: arvis MORIS st: sard: II. p. 11.*). Ludit inter duas præcedentes, sed differt ab utraque radice *annua fibrosa* nec *tuberosa*, a prima autem, cum qua convenit panicula, speciatim glumulæ valvulis *obovatis*, ala carinali superne *eroso-dentata*; ab altera præsertim panicula *cylindræa*, glumulæ valvulis *obovatis muticis* nec *mucronatis*, ala carinali superne *angustata*, perigonio 3-valvi *villoso*. Huc pertinet *Ph: commutata* quæ sec: BERTOL: l. c. p. 343. delenda a censu specierum.

\* 6. *Ph: paradoxa* = L. sp: 1665. = Spr: syst: I. 273. Bertol: fl: ital: I. p. 343. = Host: gram: austr: II. p. 30. t. 40. (*Eur: austr: Afr: bor: In comit: Nicæens: ALL: n. 2142. Ligur: occid: a Pegli et Albingauno BERTOL: l. c. p. 344. Sardin: ad margines agrorum MORIS st: sard: I. p. 52.*). Ann: Cæspitosa sub-simplex, folia *latiuscule linearia acuminata* margine *scabriuscula* vaginis *glabris* suprema *spathacea* ligula *albo-membranacea grandiuscula*, panicula *obverse oblongata breviuscula*, glumulæ inferiores *neutræ*



media et sæpe superiores fertiles cuspidatæ ala carinali abrupta scabra denticulata, perigonium 4-valve.

\* 7. *Ph. arundinacea* = L. sp: 80. = Spr: syst: I. 273. Bertol: fl: ital: I. p. 344. = Host: gram: austr: II. p. 25. t. 33. *Arundo colorata* W. aliique (*Eur.*, *Asia*. *Pedem*: frequens ad fossas aquarum et secus aquæductus ALL: n. 2143. RE fl: segus: p. 10. et fl: tor: I. p. 53. BIROLI fl: acon: I. p. 37. sub *Arundine colorata*). Peren: Valde stolonifera et cæspitosa erecta firma, folia lineari-lanceolata elongata scabra vaginis longo tractu amplexicaulibus ligula grandiuscula obtusa lacera, panicula racemosa ampla ramis patentiusculis, spiculæ secus ramos sub-secundæ compressiusculæ, glumulæ ovato-lanceolatæ acuminatæ ala carinali sub-nulla, perigonium 4-valve valvulis flosculi perfecti glabriusculis neutri minoribus margine barbatis. Habitus *Arundinis*, flores *Phalaridis*. Variat foliis ex albo vel luteo et viridi pulchre striatis; hæc colitur in hortis ad ornamentum sub nomine vern: *Erba bindel*.

## Trib: IX.

ORIZEÆ (Spiculæ paniculatæ 1-floræ; glumæ carinatae consistentia a valvulis, quarum inferior compressa carinata, distinctæ; stamina sæpius ultra 3. Gen: ex Bartl: 10. plura exotica, nonnulla obscura).

XLIX. LEERSIA Sw: prodr: p. 21. = Spr: syst: n. 267.  
 = P. de Beauv: agr: II. t. 4. f. 2. sub *Asprella*  
 = *Phalaridis*, *Asprellæ* et *Homalocenchri* spec: 1.  
 quorund:

» *Glumula* 0. *Perigon*: 2-valve 1-florum, valvula  
 » inferiore semi-ovata naviculari, superiore lanceo-  
 » lata carinata. *Stam*: 1-3-6. *Styl*: et *stigm*: 2. *Squa-*  
 » *mulæ* 2. obovatæ integræ. *Caryops*: compressa sul-  
 » cata libera (Panicula pedicellis sub flosculo arti-  
 » culatis). »

*Obs*: Genus habitu fere proprio, constans ex Spr:  
 5. stirpibus americanis, inter quas sequens crescit  
 etiam in *Eur*:

\* 1. *L. oryzoides* = Sw: l. c. = Spr: syst: I. 264.  
 Bertol: fl: ital: I. p. 335. = Host: gram: austr: I. p.  
 27. t. 35. Sub *Homalocenchro* Mieg: All: Sub *As-*  
*prella* Schreb: aliique. Sub *Phalaride* L. sp: 81.  
 (*Eur*:, *Asiæ* et *Amer*: paludosis. *Pedem*: ad fossas  
 aquæductus et secus aquas in agro *Canapiciensi* et  
*Vercellensi* admodum frequens; provenit etiam in  
 agro *Pedem*: secus fossas aquarum lente fluentium  
 ALL: n. 2131. sub *Homalocenchro*. In agro *Segus*: se-

cus aquas RE fl: segus: p. 10. sub *Phalaride*. In locis calidioribus ad fossas RE fl: tor: I. p. 52. In fossis oryzarum di *Rivoltella*, *Valle*, et *Candia* non rara ubi vulgo *Serla* BIROLI fl: acon: I. p. 19. *Ligur*: orient: locis paludosis agri *Clavariensis* prope ostia fluminis *Entellæ* BERTOL: l. c. p. 336.). Peren: Repens stolonifera cæspitosa, folia latiuscule linearia elongata scabra margine aculeata longe vaginata ligula brevissima truncata, panicula ampla ramis diffusis inferioribus sub-fasciculatis superioribus alternis filiformibus crispo-flexuosis, spiculæ ellipticæ compressæ, stamina 3. cum stylis inclusa. Huc forsân referenda *Poa palustris* BELLARD: app: p. 8. Vid: supra *Poam serotinam* n. 8.

L. ORYZA Lin: gen: ed: Schreb: n. 609. = Spr: syst: n. 1329. = Lam: ill: t. 264. (*Hexandr: digyn: L.*).

» *Glumula* 2-valvis 1-flora, valvulis parvis sub-  
 » inæqualibus. *Perigon*: 2-valve glumula valde lon-  
 » gius, valvulis carinato-compressis, inferiore latiore  
 » naviculari 5-nervi dorso gibba apice mucronata vel  
 » aristata, superiore 3-nervi nervis confluentibus mu-  
 » cronata. *Stam*: 3-6. *Styl*: brevis 2-partitus, stigma-  
 » tibus plumosis. *Squamulæ* 2. ovatæ sub-emarginatæ  
 » glabræ. *Caryops*: perigonio demum coriaceo vestita  
 » striata forma et colore vario. »

*Obs*: Genus habitu proprio, constans 2. stirpibus exoticis (4. ex R. et S.). Abunde penes nos colitur in Provinciis a *Duria Baltea*, *Sessite* et *Aconia* irrigatis, præsertim *Vercellensi* et *Novariensi*, *O. sativa* L. sp: 475. cujus patria dubia (forsân *Ind*: orient:



vel *Æthiopia* sec: R. et S.). Optimatibus, conductoribus divitias, populo calamitatem, Moderatoribus opprobrium extensa nimis hujusce cerealis cultura suppeditat, gignit. Planta hexandra paludosa annua simpliciuscula foliis plus minus anguste linearibus elongatis scabris, vaginis glabris ligula membranacea obtusa, panicula ampla ramis sparsis erectis et fere strictis sub-ramulosis tortuosis, spiculæ secus ramos ramulosque alternæ pedicellatæ sæpius ellipticæ. Variat multimode perigonio plus minus longe aristato vel etiam prorsus mutico, colore a stramineo ad nigrum, plus minus evidentius striato-nervoso, vel etiam lævi seu nervis obsoletis, glabro vel piloso etc. Cons: inter alios R. et S. syst: VII. p. 1367. et seq: in obs: Vulgo penes nos dicitur *Rison* quum semina post panicularum trituram sunt adhuc perigonio vestita, *Risbianc* postquam ope appositi pili denudata evadunt.

Trib: X.

BAMBUSACEÆ (Arborescentes, spiculæ paniculatæ multifloræ; stamina sæpius 6.; stylus 1. Gen: 7.  
ex Bartl: omnia exotica varia obscura).

LI. BAMBUSA Schreb: in Lin: gen: n. 607. = Spr: syst: n. 1280. = Lam: ill: t. 264. f. 2. sub *Nasto* = *Arundinis* spec: L. et Lour:

» Flores polygami inferiores hermaphroditi, superiores masculi. *Glumula* et *perigon*: 2-valve. *Styl*: 3-partitus. *Squamulæ* hypogynæ 3. (Char: ex SER:).  
» Obs: Genus ab Auctoribus valde illustratum et ta-

men adhuc obscurum. Cons: NEES in MART: fl: brasil: II. p. 532. nec non R. et S. syst: VII. p. LXXXI. Spec: sec: SPR: 3. ex Ind: orient: calidioribus. Occurrit raro in calidariis nostris *B. arundinacea* W. sp: II. 245. (*Arundo Bambos* L. sp: 120.), sed illam numquam florentem vidi. Hæc, aliæque affines stirpes vel varr: suppeditant cannas illas quæ veniunt in commercio sub nomine *Bambou*.

Trib: XI.

Genera quoad locum dubia ex Bartl: 18.  
quorum pars maxima exotica et obscura.

LII. NARDUS Lin: gen: ed: Schreb: n. 97. excl: 3. stirpib: = Spr: syst: n. 239. = Lam: ill: t. 39. (*Triandr: monogyn: L.*).

» *Glumula* 1-valvis minutissima ex dente rachidis.  
» *Perigon:* 2-valve 1-florum, valvula exteriori lanceolato-lineari aristulata, interiore breviori mutica  
» ab exteriori basi convoluta. *Stam:* 3. perigonio breviora. *Styl:* 1. stigmate simplici elongato puberulo. *Caryops:* linearis libera 1-sulcata. »

*Obs:* Dissentiunt Auctores circa veros characteres huic generi tribuendos. Apud L., R. et S. et SPR: *calyx* seu *glumula* 0., *corolla* seu *perigon:* 2-valve involutum cum semine connatum. Apud DC. e contrario *glumula* 1-flora 2-valvis, *perigon:* 0. Apud BERTOL: *glumula* 1-valvis facta dente racheos membranaceo, *corolla* 2-valvis. Mihi videtur magis consonum generatim organis *Graminearum* pro *glumula* habere

squamulam illam in quam expanditur unusquisque dens rachidis quæque reapse recipit flosculos; hi autem verum *perigonium* constituunt genitalia includens. Demptis Linnæanis stirpibus ad *Psilurum* (*N. aristata*), *Microchloam* (*N. indica*), et *Oropetiam* (*N. thomæa*) amandatis, constat 2. stirpibus tantum altera europæa, altera ex *Ind:* orient:

\* 1. *N. stricta* = L. sp: 77. = Spr: syst: I. 237. Bertol: fl: ital: I. p. 824. = Host: gram: austr: II. p. 4. t. 4. (*Eur:* passim. *Pedem:* in pascuis montanis et subalpinis frequens ALL: n. 2129. RE fl: segus: p. 10. Abunde in locis humentibus *della Mandria*, et *della Praglia di Pianezza* RE fl: tor: I. p. 52. In pascuis arenosis frequens BIROLI fl: acon: I. p. 18. In alpibus *della Scaggia* retro *Pegli* in *Ligur:* occid:, *Ligur:* orient: a *Gambaro* et a *S. Steffano d'Aveto* BERTOL: l. c. p. 825.). Peren: Repens cæspitosa, folia radicalia fasciculata filiformia duriuscula curvula culmea pauca breviora, spica terminalis tenuis recta elata secunda, spiculæ subulatæ solitariæ vel per paria approximatae sed constanter secundæ.

LIII. LYGEUM Lin: gen: ed: Schreb: n. 99. = Spr: syst: n. 238. = Lam: ill: t. 39. (*Triandr: monog: L.*).

» *Glumula* 1-valvis 1-3-flora, valvula cucullata  
 » spathacea chartacea flosculos obvolvente. *Flosculi*  
 » inferne connati in pedicellum communem densis-  
 » sime villosum. *Perigon:* 2-valve membranaceum,  
 » valvula exteriori breviori interiorem amplexante.  
 » *Stam:* 3. ad latus valvulæ exterioris inserta demum  
 » perigonio longiora. *Styl:* 1. simplex stigmate glabro.



» *Caryops*: oblonga libera nidularis intra partem con-  
» natam flosculorum. »

*Obs*: Genus pariter ab Auctoribus varie determi-  
natum. *Cons*: BERTOL: fl: ital: I. 826. et 827. in obs:  
*Spec*: unica (*L. spartum* L. sp: 78.) ex *Eur*: austra-  
lior:, *Hispan*:, *Sicil*: Frequens *Sardin*: in pascuis  
*Cagliari*, *Sesta* MORIS st: sard: II. p. 11. Planta  
peren: repens sub-bulbosa glaucescens, folia teretia  
linearia longissima firma acuminato-mucronata vaginis  
suprema præsertim sub-inflatis, spicula solitaria ter-  
minalis primum erecta demum cernua, glumula  
(*spatha* quorund:) magna oblonga apice rostrata la-  
tere inferiore aperta. Cetera ut in genere.

LIV. *Coix* Lin: gen: ed: Schreb: n. 1405. = Spr: syst:  
n. 243. = Lam: ill: t. 750. (*Monoëc*: triand: L.,  
*Triandr*: monog: Spr: ).

» *Flores* monoici in eodem involucre demum in-  
» durato. MASC: *Glumula* 2-valvis 2-flora mutica.  
» *Perigon*: 2-valve muticum. *Stam*: 3. FOEM: *Glu*-  
» *mula* masculi. *Perigon*: alterum perfectum 2-valve,  
» alterum neutrum 1-valve; in perfecto *styl*: 1-2-  
» fidus, *stigmatib*: 2. *Caryops*: sub-globosa ossea in-  
» volucre indurato margaritaceo cincta. »

*Obs*: Genus habitu prorsus proprio, constans 5.  
stirpibus ex utraque *India*, 1. forsan europæa.

\* ? 1. *C. Lacryma* = L. h. Cliff: 437. = Spr:  
syst: I. 238. = Lam: l. c. Vern: *Lacrima Christi* (*Ind*:  
orient: In agro *Nicæens*: legit D. GIUDICE ALL: n. 2289.).  
Planta ann: glaberrima foliis late lanceolatis vaginis-  
que striatis, ligulæ loco macula fusca fasciata pe-

dunculis 1. 2. axillaribus sub-spicatis, caryopside nitida ovato-globosa magnitudine *pisi communis*. Post cl: ALL: nemo inter Botanicos enumeravit hanc stirpem pro europæa; colitur in hortis curiositalis gratia.

LV. ZEA Lin: gen: ed: Schreb: n. 1403. = Spr: syst: n. 242. = Lam: ill: t. 749. (*Monoëc: triandr: L., Triandr: monog: Spr:*).

» *Flores monoici*. MASC: Panicula racemosa terminalis. *Glumula* 2-valvis 2-flora. *Perigon: 2-valve*  
 » glumulam sub-æquans. *Stam: 3.* filamentis sub-  
 » coalitis, antheris distinctis. FOEMIN: sessiles densissime in panicula oblonga axillari immersi. *Glumula* 2-valvis 1-flora. *Perigon: 2-valve* glumula  
 » brevius. *Styl: 1.* longissimus filiformis, stigmate  
 » simplicissimo. *Caryops: sub-globosa angulosa spiratim* in alveolis paniculæ semi-immersa. »

*Obs:* Genus fructificatione et habitu proprio, constans 1. 2. stirpibus ex *Amer:*, annuis, culmo elato crasso simplici, foliis amplis late lanceolatis integerrimis vel serratis (in *Z. Caragua* MOLIN:). Undique et abunde colitur in regionibus calidis et temperatis totius orbis *Z. Mays* = L. h. Cliff: 437. omnibus nota, veniens in *Pedem:* nomine vern: *Melia*, multimode varians magnitudine, forma et colore seminum a fulvo ad album, tum etiam plus minus præcociori vegetatione et omnium partium magnitudine; panicula foeminea cultura fit etiam semi-pedalis in var: *Ostenga* dicta (*Z. vulgaris*); duplo minor uti tota planta in var: *Quarantina* appellata (*Z. præcox*). Usus hujusce cerealis valde extensus maxime penes rusticos et agri-

colas pro pulte et pane conficiendo, quibus egeni et montani præcipue aluntur.

Obs: geographica circa *Gramineas*.

*Gramineæ* per orbem sparsæ circiter . . . 1150

*Gramineæ* pedemontanæ.

<i>Stipa</i> . . . . .	6
<i>Lagurus</i> . . . . .	1
<i>Polypogon</i> . . . . .	2
<i>Gastidium</i> . . . . .	1
<i>Agrostis</i> . . . . .	8
<i>Calamagrostis</i> . . . . .	4
<i>Psamma</i> . . . . .	1
<i>Holcus</i> . . . . .	3
<i>Avena</i> . . . . .	13
<i>Danthonia</i> . . . . .	1
<i>Triodia</i> . . . . .	1
<i>Melica</i> . . . . .	6
<i>Molinia</i> . . . . .	1
<i>Glyceria</i> . . . . .	1
<i>Briza</i> . . . . .	3
<i>Poa</i> . . . . .	17
<i>Bromus</i> . . . . .	15
<i>Koeleria</i> . . . . .	1
<i>Aira</i> . . . . .	13
<i>Cynosurus</i> . . . . .	3
<i>Sesleria</i> . . . . .	4
<i>Festuca</i> . . . . .	26
<i>Arundo</i> . . . . .	3
	<hr/> 134



	S. R.	134
<i>Triticum</i> . . . . .		9
<i>Æglops</i> . . . . .		4
<i>Hordeum</i> . . . . .		4
<i>Elymus</i> . . . . .		2
<i>Lolium</i> . . . . .		3
<i>Rotibollia</i> . . . . .		2
<i>Psilurus</i> . . . . .		1
<i>Lappago</i> . . . . .		1
<i>Digitaria</i> . . . . .		4
<i>Panicum</i> . . . . .		3
<i>Orthopogon</i> . . . . .		2
<i>Setaria</i> . . . . .		3
<i>Milium</i> . . . . .		3
<i>Andropogon</i> . . . . .		3
<i>Pollinia</i> . . . . .		2
<i>Sorghum</i> . . . . .		1
<i>Saccharum</i> . . . . .		1
<i>Anthoxanthum</i> . . . . .		1
<i>Crypsis</i> . . . . .		3
<i>Alopecurus</i> . . . . .		5
<i>Phleum</i> . . . . .		8
<i>Phalaris</i> . . . . .		6
<i>Leersia</i> . . . . .		1
<i>Nardus</i> . . . . .		1
<i>Coix</i> ? . . . . .		1

Et sic octavam circiter partem constituunt.

## MONOCOTYLEDONEÆ INCERTÆ SEDIS.

Ad calcem hujusce Classis refert cl: BARTL: p. 76.  
14. genera, quorum affinitas est valde dubia; plura  
sunt obscura, omnia exotica, excepto seq:

I. LEMNA Lin: gen: ed: Schreb: n. 1400. = Spr: syst:  
n. 125. = Lam: ill: t. 747. (*Monoéc: diandr: L.,*  
*W. Diandr: monog: Spr:, Bertol: Inter Filices*  
sect: IV. Juss: gen: p. 16. Inter *Najades* DC.,  
Spr: aliique. Inter *Pistiaceas* Rich: Inter *Lemna-*  
*ceas* Schult:).

» Flores monoici subinde etiam hermaphroditi. *Pe-*  
» *rigon:* simplex spathaceum 2-lobum demum mar-  
» cescens. *Stam:* 2. antheris 2-ocularibus. *Styl:* 1.  
» brevis conicus, stigmate obtuso. *Fructus* superus  
» nukulamentosus 1-2-ocularis oligospermus inde-  
» hiscens (*capsula* L., *utriculus* SPR:, *nucula* BERTOL:).  
» *Sem:* superne convexa subtus plana striata. »

*Obs:* Genus *Najadibus* et *Hydrocaridibus* quidem  
affine, sed ex expositis proprium forsan ordinem me-  
lius constituens, constans 5-6. stirpibus in aquis sta-  
gnantibus per orbem sparsis, annuis, pumilis; cau-  
liculus foliiformis (*folia* L., *frondes* SPR:, *caulophyl-*  
*lium* BERTOL:) figura varia radicans, radicibus per-  
pendicularibus apice calyptratis, vel arhizus; folia  
vere nulla ni pro ipsis cauliculum habeas; fructificatio  
lateralis. Cons: inter alios A. RICH: reliq: Richard: in  
Arch: de Botan: I. p. 200. t. 6. et A. BROUGNIART ibid:  
H. p. 99. t. 12.

\* 1. *L. trisulca* = L. sp: 1376. = Spr: syst: I. 94. Bertol: fl: ital: I. p. 123. = Lam: ill: t. 747. f. 2. (*Eur.*, *Amer.*, *N. Holl.*: *Pedem.*: in aquis lente fluentibus ALL: n. 2098. In fontibus et circa *Avilianæ* lacum RE fl: segus: p. 76. In locis aquosis a fontibus manantibus supra *la Molinetta* RE fl: tor: II. p. 108. In oryzis vulgaris BIROLI fl: acon: II. p. 103.). Cauliculus dichotome expansus segmentis lanceolatis basi longe filiformi-caudatis superne cruciato-proliferis, radícula sub summa cauliculi divisione e medio segmentorum solitaria.

\* 2. *L. minor* = L. sp: 1376. = Spr: syst: I. 94. Bertol: fl: ital: I. p. 125. = Lam: ill: t. 747. f. 4. i. A. Brougn: l. c. f. 1. optima. Vern: *Merda d' rane*, *Lentie d'Eva* uti seqq: (*Eur.*, *Amer.*, *N. Holl.*: *Pedem.*: nil frequentius ad stagnantes aquas in fossis et oris lacuum ALL: n. 2099. RE fl: segus: p. 76. et fl: tor: II. p. 108. *Sardin.*: MORIS st: sard: I. p. 53.). Cauliculus minimus oblongiusculus compressus ecaudatus sub-ellipticus unicolor, radícula solitaria, flores constanter hermaphroditi. Sæpius occurrunt plures cauliculi ita approximati ut unicam plantam constituere videantur uti in seqq:

\* 3. *L. gibba* = L. sp: 1377. = Spr: syst: I. 94. Bertol: fl: ital: I. p. 126. = Lam: ill: t. 747. f. 3. h. A. Brougn: l. c. f. 2. et A. Rich: l. c. t. 6. optima etiam pro germinatione (*Eur.*: *Pedem.*: ad oras lacuum ALL: n. 2100. In aquis stagnantibus prope *Lucengo* RE fl: tor: II. p. 109. *Sardin.*: in aquis stagnantibus frequens MORIS st: sard: I. p. 53.). Differt a priori, cui valde affinis, cauliculo obovato subtus hemisphæ-



*rico - gibboso*. Rarius quam præcedentes occurrit in *Pedem*:

\* 4. *L. polyrhiza* = L. sp: 1377. = Spr: syst: I. 94. Bertol: fl: ital: I. p. 127. = Lam: ill: t. 747. f. 1. a. b. c. (*Eur*: et *Amer*: bor: *Pedem*: in aquis stagnantibus ALL: n. 2101. RE fl: segus: p. 76. et fl: tor: II. p. 109. *Sardin*: in aquis stagnantibus *Ariola* MORIS st: sard: I. p. 53.). Cauliculus rotundo - obovatus paullo major quam in duabus præcedentibus supra planus virens subtus convexiusculus saturate ruber, radiculæ fasciculatæ.

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*Subclassis III.*

Monocotyledoneæ seu Exogenæ cryptogamæ  
(DC. fl: fr: II. p. 546. = *Vegetabilia vascularia*  
*cryptogama* Bartl: ord: nat: p. 14. =  
*Cryptogamia* sect: I. Spr: syst: IV. p. 8. ).

*Char: essentialis.*

» Fructificatio invisibilis aut irregularis. »

*Sect: I.*

*Rhizocarpæ* Bartl: l. c. p. 15. = *Rhizospermæ*  
DC. l. c. p. 577. = Spr: syst: IV. p. 3. =  
*Hydropterides* W. sp: V. XLII. L. = *Marsileaceæ*  
R. Br: prodr: ed: 1. p. 166. ed: 2. p. 22.

*Char: essentialis.*

» *Receptacula* (fructus?) clausa evalvia ad basim  
» foliorum 1 - multi - locularia corpusculis numerosis  
» dimorphis repleta. »

*Obs:* Circa innumeros terminos botanicos ab Aucto-  
ribus adhibitos ad indicandas *Cryptogamarum* partes  
tum *fructificationis* cum *herbæ*, sequar Sprengelianos  
ne confusio oriatur, aliis tamen indicatis. Cons: etiam  
*Terminologiam* W. sp: V. introd: p. VIII. et seqq:

## ORDO CXC.

## S A L V I N I A C E Æ

(Bartl: ord: nat: p. 15. = *Hydropteridum*  
pars W. l. c.).

*Char: essentialis.*

» *Receptacula* (*indusia* KUNTH, *involucra* DC.)  
» globosa in eodem individuo dimorpha, alia cor-  
» pusculis angulatis varie inclusis et pro antheris ha-  
» bitis repleta, alia 1-ocularia *capsulas* (*sacculi* BARTL.,  
» *sporæ* KUNTH) numerosas pedicellatas columnæ cen-  
» trali adfixas polymorphas includentia. »

*Obs:* Ordo constans 2. generibus, quorum alterum  
(*Azolla*) exoticum. Plantæ aquaticæ natantes, foliis  
sessilibus integris.

I. SALVINIA Michel: gen: p. 107. t. 58. = Lin: gen: ed:  
Schreb: n. 1617. = Spr: syst: n. 3214. = Lam:  
ill: t. 863. (*Marsileæ* sp: L. Inter *Filices* sect: V.  
Juss: gen: p. 16.).

» *Receptacula* costata sub-pedicellata axillaria ag-  
» gregata. *Capsulæ* globosæ demum annulatæ semina  
» globosa continentes. »

*Obs:* Genus constans 4-5. stirpibus americanis, 1.  
tantum europæa; herbæ ramosæ diffusæ, foliis in ra-  
mis pinnatim dispositis, fructificatione intra singulos  
radicum fasciculos.



\* 1. *S. natans* = All: n. 2419. = Spr: syst: IV. p. 9. = Lam: ill: t. 863. Sub *Marsilea* L. sp: 1562. *M. salvinoides* Neck: in act: pal: III. phys: p. 297. t. 21. (Eur:, Amer: Pedem: circa lacus *Eporedienses* et in fossis aquarum stagnantium, etiam secus *il Po morto* et locis paludosis prope *Vinovo* ALL: l. c. Loco dicto *il Po morto* inter *Moncalieri* et *l'Alloggia* RE fl: tor: II. p. 185. In stagnis *Padi*, *Ticini* et lacus *Verbani* BIROLI fl: acon: II. p. 152. sub *Marsilea*). Perenn: Valde diffusa, folia elliptica superne stellato-papillosa inferne ramisque fasciculoso-pilosis, receptacula sub-sessilia glomerata.

Obs: geographica circa *Salviniaceas*.

<i>Salviniaceæ</i> per orbem sparsæ . . . .	9
<i>Salviniaceæ</i> pedemontanæ . . . .	1

## ORDO CXCI.

## MARSILEACEÆ

(Bartl: ord: nat: p. 15. = *Hydropteridum*  
pars W. l. c.).

*Char: essentialis.*

» *Receptacula* uniformia clausa evalvia pluri-  
» cularia *capsulas* granulatis repletas et alia *corpuscula*  
» membrana hyalina laxè involuta materia granulosa  
» farcta, includentia. »

*Obs:* Ordo constans 2. tantum generibus; plantæ  
aquaticæ natantes, caule repente ramoso, foliis alter-  
nis vernatione circinatim involutis, nunc sessilibus  
filiformi-setaceis, nunc longe petiolatis quaternis.

I. MARSILEA Lin: gen: ed: Schreb: n. 1618. = Spr: syst:  
n. 3210. = Lam: ill: t. 863. = Sub *Salvinia* Juss:  
gen: p. 16.

» *Receptaculum* pedunculatum ovale hirsutum dis-  
» sepimento longitudinali. *Capsulæ* (*ovaria* R. Br: ,  
» *germina* Spr:) ovali-oblongæ, sacculis binis utrin-  
» que ad basim granula in latice mucoso continen-  
» tibus. »

*Obs:* Genus constans 8. stirpibus præsertim ex *Ind:*  
*orient:*, *Afr:* et *N. Holl:*, 1. tantum etiam europæa;  
herbæ repentes, foliis longe petiolatis quaternis, fo-  
liolis cuneiformibus integerrimis vel dentatis glabris

vel plus minus hirsutis, fructificatione supra basim petioli pisiformi stipitata solitaria aut multiplici. Cl: R. Br: prodr: ed: 2. p. 23. observat, de functione organorum hujusce generis haud certum esse.

\* 1. *M. quadrifolia* = L. sp: 1563. = Spr: syst: IV. 8. = Lam: ill: t. 863. (*Eur: , Afr: bor: , ins: Mascaren: , N. Holl: Pedem: circa lacus Eporedienses ALL: n. 2418. In aquis stagnantibus della Praglia di Pianezza RE fl: tor: II. p. 185. In fossis et aquis stagnantibus ubique BIROLI fl: acon: II. p. 152. Sardin: in aquis stagnantibus circa Ozieri MORIS st: sard: I. p. 53.*). Perenn: Foliola obovato-cuneata integerima petiolique glabri, receptacula sub-terna elliptica. Herba facie *Oxalydis tetraphyllæ*.

II. *PILULARIA* Lin: gen: ed: Schreb: n. 1619. = Spr: syst: n. 3211. = Lam: ill: t. 862. = Inter *Filices* sect: IV. Juss: gen: p. 16.

» *Receptaculum* breve pedunculatum globosum 4-partibile. *Capsulæ* (*germina* Spr:) numerosæ sub-ovatæ, sacculis pyriformibus pellucidis granula continentibus. »

*Obs:* Structura receptaculi et habitu præsertim distinguitur hoc genus a præcedenti, cui valde affine. Stirps unica.

\* 1. *P. globulifera* = L. sp: 1563. = Spr: syst: I. 9. = Lam: ill: t. 862. (*Eur: Pedem: in paludosis circa Frossasco et la Marsaja, in fossis aquarum stagnantium locis calidioribus non infrequens ALL: n. 2420.*). Perenn: Repens filiformis glaberrima ad nodos superne foliosa inferne radicans foliis cylindræis



circinatim involutis demum erectis, receptaculis radicalibus. Variat caule longissimo (4-5-pedali), receptaculis squamosis (*P. natans* MÉRAT flor: de Paris ed: 3. tom. I. p. 369.).

Obs: geographica circa *Marsileaceas*.

*Marsileaceæ* per orbem sparsæ . . . . . 9

*Marsileaceæ* pedemontanæ . . . . . 1

## ORDO CXCI.

### I S O E T E Æ

(Bartl: ord: nat: p. 16. = *Hydropteridum*  
pars W. l. c.).

*Char: essentialis.*

- » *Receptacula* (capsulæ W.) basi foliorum inclusa
- » membranacea evalvia 1-ocularia, trabeculis (*tro-*
- » *phosperma* BARTL.; *flores masculi* L., *receptacula* W.)
- » filiformibus transversis e foliis nervo ortis germini-
- » busque globosis tricostatis (*flores fœminei*, *cap-*
- » *sula* L., *coccula* DC. fl: fr: n. 1448.) farcta. »

Obs: Ordo pro unica stirpe fructificatione propria creatus.

- I. ISOETES Lin: gen: ed: Schreb: n. 1620. = Spr: syst: n. 3212. = Lam: ill: t. 862. = Inter *Filices* sect: V. Juss: gen: p. 17. = Inter *Lycopodiaceas* DC. syn: fl: gall: n. 145. p. 117.

» Charact: ordinis. »

1. *I. lacustris* = L. l. c. (In lacubus *Eur.*, *Asiæ* et *Amer.*: bor: *Sardin.*: in palustribus *Pula* et litoris orientalis circa *Maravera* MORIS st: sard: III. p. 12.). Perenn: Radicibus fibrosis crassis ad collum bulbosis, folia erecta cæspitosa basi dilatata ibique fructificationem includentia hinc plus minus late linearia gradatim angustiora apice subulata. *I. coromandelina* L. fil:, *longifolia* DELIL: et *setacea* Bosc: nunc pro varr: habentur.

## Sect: II.

*Filices* W. sp: V. p. XLVII. =

Bartl: ord: nat: p. 16. = *Filicum* genera  
nonnullis exclusis omnium Auctor:

*Char: essentialis.*

» *Capsulæ* (*sporangia* KUNTH, BARTL:) uniformes  
» 1 - loculares polyspermæ definite dehiscentes, in  
» *frondium* (*folia*) dorso vel margine e venulis ex-  
» sertæ, et sæpissime in *soros* (*capsularum acervuli*)  
» nudos vel indusiatos conglomeratæ (*indusium* est  
» membrana forma varia *soros Filicum* obducens vel  
» obtegens) interdum ex ipsa *frondium* lamina factæ  
» et tunc in spicas dispositæ. *Sporæ* (*semina*) nume-  
» rosæ minutæ globulosæ vel sub-angulatæ germina-  
» tione squamulam membranaceam viridem exerentes  
» quæ deorsum radículas sursus plumulam emittit. »

*Obs:* Sectio naturalissima varie ab Auctoribus di-  
visa, 3. ordines ex BARTL: comprehendens; plantæ  
herbaceæ rhizomate perennantes vel rarius arbore-  
scentes, *stipite* (*caulis, truncus*) lignoso, *frondibus*  
sparsis vel ex apice rhizomatis aut stipitis fasciculatis  
vernatione circinnato-involutis simplicibus integris vel  
varie sectis; species plures præsertim arborescentes  
locos humidiusculos regionum tropicalium exornant,  
magnitudine, pulchritudine et copia versus polos di-  
minuuntur. Cons: pro *Filicum* divisione inter alios  
Sw: synopsis: *Filic*; W. sp: V.; DESV: prodr: des Fou-



gér: in ann: soc: linn: Paris: 1827. II. livrais: p. 170.,  
 et in bull: univ: 1828. p. 420. Avril; GAUDICH: in  
 bull: univ: l. c. p. 418.; NEES D'ESCU: Essai sur l'hist:  
 des progrès faits sur la connaissance des Fougères etc.  
 in bull: univ: l. c. p. 119.; et pro *Filicibus* rariori-  
 bus præsertim H. SCHOTT: genera *Filicum* Vindeb:  
 1834., splendidissimum opus nitidissimis tabulis æneis  
 illustratum summa magnanimitate a cl: Auctore nobis  
 donatum.

## ORDO CXCH.

## POLYPODIACEÆ

(R. Br: prodr: ed: 1. p. 145. ed: 2. p. 1. =  
 Bartl: ord: nat: p. 17. = *Gyratæ* Sw: syn:  
 Filic: = *Filicum* pars Juss: gen: p. 14. =  
 J. S. Hill: fam: I. p. 42. t. 6. = *Filices veræ*  
 Spr: syst: IV. p. 5.).

*Char: essentialis.*

» *Capsula* ex frondium dorso vel margine in soros  
 » sub-rotundos vel lineares indusiatos vel nudos con-  
 » fertæ, annulo articulado elastico longitudinali cin-  
 » ctæ transversim irregulariter rumpentes. »

*Obs:* Ordo in 2. tribus divisus sc: *Indusiatæ* vel  
*Nudæ*, constans ex BARTL: 60. generibus, inter quæ  
 nonnulla obscura, multa exotica.

## Trib: I.

INDUSIATÆ (Sori *indusio* præditi.

Genera 48.).

I. HYMENOPHYLLUM Sm: act: taur: V. p. 418. t. 9. f. 8.  
 = Spr: syst: n. 2283. = Lam: ill: t. 870. = *Trichomanes* et *Adianthi* spec: nonnullæ quorund: =  
*Hymenophylli* et *Trichomanes* spec: Poir: (Inter  
*Filices desciscentes* Spr:).

» *Capsulæ* sessiles receptaculo communi cylindra-  
 » ceo sub-clavato margini frondis insertæ. *Indusium*  
 » obtegens (*involucrum* R. Br:) 2-valve textura fron-  
 » dis, valvis planis externis liberis. »

*Obs:* Genus constans ex SPR: 48. stirpibus exoticis  
 præsertim ex utraque *India* et *N. Holl.*, 1. tantum  
 europæa (*H. tumbrigense* Sw:, sub *Trichomane* L. sp:  
 1561.) frondibus teneris sub-pellucidis (sine epider-  
 mide et poris corticalibus SPR:) 2 - 3 - pinnatis raro  
 simplicibus, glabris vel pilosis. *Trichomanes* L. vix  
 differt ab *Hymenophyllo* receptaculo *setiformi*, indu-  
 sio 1 - *phyllo*. Sequentes species possideo ex BERTERO  
 valde dubias vel novas.

1. *H. fuciforme* = Spr: syst: IV. 132. ex Sw:  
 Colla pl: rar: chil: fasc: VII. ined: t. LXIII. (Ins:  
*Chiloë*). Stipes alatus, frondes 3-pinnatæ pinnis al-  
 ternis longissimis foliolis linearibus sub-emarginatis.  
 In specim: a BERTERO missis cum dubitationis signo e-  
 rupibus montium ins: *Juan - Fernandez* stipes alatus  
 non adparet sed parum compressus et suberosus, ra-

chis filiformis erecta a basi ad medium nuda glaberrima, pinnae primariae non reapse 2-pinnatae sed irregulariter pinnati-sectae segmentis linearibus apice retusis. Sori sunt terminales ad lacinulas ovati apice truncati ibique mucrone ipsis longiore cito deciduo instructi. = 2. *H. ferrugineum* = Colla l. c. *H...*? an *Trichomanes alata* Sw: Berter: in sched: « *H. un-*  
 » *dique ferrugineo-pilosum, stipite rachideque tere-*  
 » *tibus, fronde pinnata, pinnis alternis ovatis pin-*  
 » *nati-sectis, segmentis 2-3-fidis simplicibusque,*  
 » *laciniis linearibus obtusis, soris terminalibus glo-*  
 » *bosis. »* (Ad rupes et arborum radices in sylvis umbrosis montium editiorum ins: *Juan-Fernandez*). = 3. *H. semiteres* = Colla l. c. t. LXI. *H...*? Berter: in sched: « *H. elatum undique glaberrimum, stipite*  
 » *rachideque semi-teretibus exterius canaliculatis, fron-*  
 » *de 2-pinnata, pinnis alternis approximatis elongatis*  
 » *patentiusculis, pinnulis inaequaliter pinnati-sectis de-*  
 » *currentibus, segmentis 2-3-fidis simplicibusque li-*  
 » *nearibus obtusis, soris terminalibus marginalibus-*  
 » *que ovatis. »* (Cum priori). = 4. *H. nigricans* = Colla l. c. t. LXII. *H...* an *Trichomanes?* ad arborum truncos in sylvis montanis ins: *Juan-Fernandez* Berter: in sched: « *H. stipite repente rachideque te-*  
 » *retibus nigricantibus squamulosis, fronde 2-pinnata*  
 » *glabra, pinnis alternis oblongis, pinnulis incisis*  
 » *laciniisque linearibus acutiusculis margine argute*  
 » *serratis, soris ovatis supra-axillaribus, indusio laevi*  
 » *ante dehiscientiam acuto, capsulis sub-angulatis. »*



II. DAVALLIA Sm: act: taur: V. p. 414. t. 9. f. 6. = Spr: syst: n. 3272. = *Humatæ*, *Adianti*, *Trichomanes*, *Dicksoniæ*, *Saccolomæ*, *Polypodii*, *Lindseæ*, *Acrostichi*, *Dareæ*, et *Chenopteridis* sp: nonnullæ quorund: = *Trichomanes* sect: III. Poir:

» *Sori* sub-rotundi margini plerumque approximati.  
 » *Indusia* superficialia cucullata ex apice venæ unice  
 » orta, lateribus vel lata basi adnata extrorsum et  
 » verticaliter libera (char: ex R. Br:). »

*Obs:* Genus pariter adhuc obscurum, constans ex SPR: 45. stirpibus exoticis ex utraque *India*, *Afr:* et *N. Holl:*, 1. tantum etiam europæa (*D. canariensis* SW: *Polypodium lusitanicum* et *Trichomanes canariense* L. Ins: *Canariis*, *Lusitania*), plerumque arborescentibus, frondibus raro simplicibus vel ternatis sæpius pinnatis 2-pinnatis vel decompositis. Habeo ex BERTER: unicam stirpem quam novam existimo.

1. *D. Berteriana* = Colla pl: rar: chil: fasc: VII. ined: t. LXV. *D. an n. sp:?* *an genus distinctum?* Berter: in sched: « *D. stipite* arboreo (caudex 6-15-  
 » pedalis ex BERTER:), rachide subtus lævi planiuscula  
 » supra sulcata ferrugineo-pilosa, frondibus 3-pin-  
 » natis maximis glabris erectiusculis, pinnis alternis  
 » ovatis 25-30-jugis, jugis patentissimis lineari-lan-  
 » ceolatis pinnulatis, pinnulis sterilibus ovato-ob-  
 » longis approximatis repando-denticulatis sub-de-  
 » currentibus fructiferis remotiusculis sinuatis ad si-  
 » num apicem subtus globoso-soriferis. » Lecta in  
 sylvis densis mont: edit: ins: *Juan-Fernandez*. Pinnulæ fructiferae inferiores margine utroque referunt

4-5. soros qui diminuuntur gradatim in pinnulis superioribus; laciniae in hisce pinnulis fere evanidae fiunt ut earum locus a soris quasi totus occupetur.

III. *DICKSONIA* L'Herit: sert: angl: 30. = Spr: syst: n. 3273. = *Polypodii*, *Balantii*, *Trichomanes*, *Nephrodii*, *Aspidii*, et *Cheilanthes* spec: nonnullæ quorund:

» Sori sub-rotundi marginales distincti. *Indusium*  
 » pseudo-2-valve, verum superficialium ex apice venæ  
 » ortum membranaceum extrorsum liberum, spurium  
 » e lobulo pinnæ reflexo alterum æquitans (char: ex  
 » R. Br: ). »

*Obs:* Genus vix a priori distinctum indusii structura, constans 20-25. stirpibus exoticis, inter quas nonnullæ obscuræ. Possideo *D. rubiginosam* = Spr: syst: IV. 123. ex Kaulf: (*Brasil*., *Jamaic*:). Communicata a cl: MARTIO ex *Brasil*., perfecte quadrat cum diagnosi SPR: l. c.; sori minutissimi vix oculis nudis conspicui.

IV. *WOODSIA* R. Br: trans: linn: vol. II. p. 173. t. 11. et prodr: ed: 2. vol. I. p. 14. in obs: IV. ad *Al-sophilam* sub *Woodia* forsan ex errore typographico = Spr: syst: n. 3277. = *Ceterach*, *Acrostichi*, *Polypodii*, *Aspidii*, et *Nephrodii* spec: nonnullæ quorund:

» Sori sub-rotundi sparsi. *Indusium* membranaceum  
 » apertum lacero-multifidum laciniiis crinitis capsulas  
 » pedicellatas includens. *Receptaculum* commune ele-  
 » vatum o. (char: ex R. Br: ). »

*Obs:* Genus a R. Br: statutum pro 2. stirpibus jam ad *Polypodium* spectantibus, sed indusii præsentia et habitu divergentibus, nunc constans ex Spr: 4. stirpibus americanis, quarum 2. *Europæ* etiam incolæ.

\* 1. *W. hyperborea* = R. Br: ll. cc. = Spr: syst: IV. 125. *Acrostichum ilvense* Huds: non L. = *A. hyperboreum* Liliebl: act: holm: 179. p. 201. t. 8. *Polypodium hyperboreum* Sw:, W. *P. ilvense* Vill: non Sw: nec W. *Ceterach alpinum* DC. fl: fr: n. 1435. (Alpib: *Eur:* med: et bor:, *Amer:* bor; *Pedem:* in rupibus prope lacum di *Valtournance* apud *Augustanos* BALB: addit: p. 98. sub *Acrosticho ilvense*). Perenn: Pumila, stipites glabri rubescentes basi imbricato-squamosi, rachis pilosiuscula tenuissime ac remote squamulosa, frondes lineari-lanceolatæ pinnatæ, pinnæ sub-sessiles ovatæ inferiores alternæ remotiusculæ hinc gradatim minores magisque approximatae inæqualiter lobato-pinnatifidæ lobis rotundatis, sori in dorso sparsim sub-confluentes. Verum *Acrostichum ilvense* L. (*Polypodium* Sw:, W.), nunc sub *Woodsia*, differt frondibus *latioribus* subtus *hirtis*, pinnis *lanceolatis*, soris *magis confluentibus*, nec invenitur, quod sciam, in *Pedem:*

V. ADIANTUM Lin: gen: ed: Schreb: n. 1633. excl: variis stirpib: = Spr: syst: n. 3269. = Lam: ill: t. 870.

» Sori marginales sub-rotundi vel lineares. *Indusium* e margine frondis replicato, disco venoso cap-sulifero, limbo membranaceo libero. »

*Obs:* Genus distinctissimum, constans ex Spr: stirpibus 63. præsertim ex regionibus calidis *Indiarum*.



et *Afr.*; 1. tantum etiam europæa, frondibus varie pinnatis rarissime simplicibus.

\* 1. *A. Capillus veneris* = L. sp: 1558. = *A. Capillus* Spr: syst: IV. 113. = Lam: ill: t. 870. f. 1. Vern: *Capel Venere* (*Anglia, Eur: med: et austr:, Afr: bor:, Ind: occid:, ins: Mascaren: Pedem:* ad rupes et fontium scaturigines locis a sole minime percussis, secus *Padum* non infrequens, multo vulgatius sive in pratis sive in rupibus *Liguria* et collium maritimarum ALL: n. 2417. In muris fontium *del Valentino* ac in caveis ad *Padi* ripam inter *Valentinum* et *Taurinum* RE fl: tor: II. p. 185. Abunde in locis humentibus atque saxosis inter *Foresto* et *Bossoleno* tum quoque *alle Blaccie* et *a Mompantero* RE fl: segus: p. 85. In muris humidis et ad rupes collium *BIROLI* fl: acon: II. p. 152. *Sardin:* in montanis humidis MORIS st: sard: I. p. 53.) Perenn: Glaberrimum, rachis filiformis lævissima nitido-nigrescens, frondes 2-pinnatæ pinnis alternis 3-5-jugis pinnulis alternis brevipedicellatis obovato-cuneatis inæqualiter lobatis lobis fertilibus serratis raro lineari-oblongo-terminatis.

VI. CHEILANTHES SW: syn: Filic: p. 5. = Spr: syst: n. 3270. = *Cincinalidis*, *Pteridis*, *Adianti*, *Polypodii*, *Notholænæ*, *Nephrodii*, *Acrostichi*, *Trichomanes*, *Lonchitidis*, *Dicksoniæ* spec: nonnullæ quorund:

» *Sori* marginales punctiformes. *Indusium* e margine frondis ortum continuum sinuosum intus liberum sinubus capsuliferum. »

*Obs:* Genus habitu priori valde affine, constans ex SPR: 38. stirpibus exoticis, 1. tantum europæa.

\* 1. *Ch: odora* = Sw: syn: Filic: 127. et 327. = Spr: syst: IV. 116. = Schk: crypt: 115. t. 123. *Pteris acrosticha* Balb: addit: p. 98. *Adiantum odorum* DC. fl: fr: suppl: p. 237. (*Helvet: Ital: Gall: austr: Pedem:* in muris sub - humidis vineas di *Mompintero* circumambientibus secus viam in medium sitam haud procul a *Segus*: BALB: l. c. Ad muros in vineis di *Croale* RE fl: segus: p. 84. In plaga orientali *Liguria*, *Legnaro* prope torrentem *Valle da fondo* secus viam in murorum fissuris Viv: fragm: fl: ital: sub *Adianto fragrante* male. *Sardin:* ad rupes in montibus MORIS st: sard: I. p. 54.). Perenn: Pumila cæspitosa, stipites rufescenti-squamosi rachidesque filiformes basi pilosæ, frondes 3 - pinnatæ 8 - 10 - jugæ pinnis sub - oppositis patentissimis sub - 2 - pinnatis, foliola rotundata minima, indusia sub-fimbriata. Perperam confusa a quibusdam cum *Adianto fragrante* L. *Indiar:* orient: incola. Habeo eandem plantam ex hb: BELLARDI sub nomine *Adianti pumili* c. descr: Novam stirpem ipse credidit, sed attente a me perpensa et comparata cum multis specim: *Ch: odoræ*, ab hac minime differre constitit.

VII. LINDSÆA Dryand: act: soc: Linn: Lond: III. p. 40. = Spr: syst: n. 3259. = *Adianti* et *Pteridis* spec: nonnullæ Auctorum.

» Sori lineares margine paralleli sæpiusque ei approximati. *Indusium* ex apicibus venarum ortum  
» extra liberum. »

*Obs:* Genus habitu duorum præcedentium, in quibusdam stirpibus accedens magis ad *Pteridem*. Species

ex SPR: 23. omnes exoticæ. Possideo = 1. ex BERTERO *L. trapeziformem* = Dryand: l. c. p. 42. t. 9. (*Gualupa*). = 2. ex MART: *L. strictam* = Dryand: l. c. et Schk: crypt: 105. t. 114. (*Brasil*).

VIII. PTERIS Lin: gen: ed: Schreb: n. 1626. excl: nonnullis stirpib: = Spr: syst: n. 3257. = Lam: ill: t. 869. = *Polypodii*, *Adianti*, *Phyllitidis*, *Acrostichi*, *Lindseæ*, *Cheilanthes*, et *Lonchitidis* spec: nonnullæ quorund:

» *Sori* lineares marginales continui. *Indusium* continuum sinubus capsuliferum intus liberum. »

*Obs*: Genus numerosissimum (spec: 118. ex SPR:), pro nonnullis stirpibus adhuc obscurum et forsitan in posterum dividendum. Plantæ per orbem sparsæ præsertim in regionibus calidis, 3. tantum europææ, frondibus simplicibus (raro), vel varie divisis.

\* 1. *Pt. cretica* = L. mant: 130. excell: synn: præter Tournefortii = Spr: syst: IV. 72. = Schk: crypt: 85. t. 90. Tournef: inst: 544. t. 321. (*Eur: austr: , Creta, Arab: Pedem: raram stirpem novumque civem detexit in vallecula umbrosa agri Nicæens: cl: DE SUFFREN. Vidit etiam in sylvaticis umbrosis Tendæ BEL-LARD: app: p. 50.*). Perenn: Glabra, frondes simpliciter pinnatæ, pinnæ sub-oppositæ anguste lanceolatæ acuminatæ brevissime petiolatæ tenuissime serrulatæ infima sæpe 2- vel 3-partita. Habeo etiam ex *Massa Carrara* a cl: BERTOL:

\* 2. *Pt. aquilina* = L. sp: 1533. = Spr: syst: IV. 78. = Schk: crypt: 87. t. 95. et 88. t. 96. pro var: *β caudata*. *Filix foemina* Blackw: t. 325. Vern: *Fîles*,



*Fleis*, *Feis* uti fere omnes *Filices* indigenæ (*Eur.*; *Asia*, *Amer.*: bor: *Pedem.*: ubique in pascuis sterilibus collium et montium vulgarissima, uti etiam frequens in sylvis montanis apricis ALL: n. 2391. RE fl: segus: p. 84. et fl: tor: II. p. 184. BIROLI fl: acon: II. p. 147. *Sardin.*: in pascuis montanis collinisque frequens MORIS st: sard: II. p. 12.). Perenn: Glabra, frondes 3-partito-decompositæ, rami seu pinnæ primariæ 2-pinnato-multijugæ, pinnæ secundariæ patentes lineari-lanceolatae superiores sub-integræ inferiores pinnatisectæ segmentis oblongis obtusis. Variat frondibus ciliatis (*Pt.*: *lanuginosa* SPR: non BORY), vel statura valde minori (*Filix saxatilis* RAY:) quod naturæ soli tribuit cl: W. Rachis versus basim oblique secta imaginem aquilæ imperialis quodammodo exprimit, unde nomen specificum.

*Species dubiæ vel fortassis novæ.*

3. *Pt. paradoxa* = Mart: hb: Habeo sub hoc nomine a cl: MARTIO unicum frondem fructiferam insignis stirpis *Brasil.*: lectæ. Hæc exhibet rachidem semi-teretem glaberrimam nitidam saturate rubram simpliciter pinnatam; pinnæ omnes sunt oppositæ æquidistantes (1-poll: ab una ad alteram) lanceolatae curvulae acutæ basi late decurrentes longitudine fere dodrantali latit: semi-pollicari, subtus ferrugineæ opacæ sed glabræ, supra læte virides nitidæ punctis albidiusculis adpersæ, inferiores interdum 2-3-partitæ; sori ad marginem inferiorem confluentissimi minutissimi. = 4. *Pt. campestris* = Mart: hb: Unam pariter

frondem sed sterilem possideo a cl: Auctore ex *Brasil*;  
 ipsa est 2-pinnata, rachide obtuse tetragona rubella  
 pilosiuscula punctis saturationibus adspersa, pinnis  
 patentissimis inferioribus alternis pinnatis multijugis  
 hinc gradatim brevioribus paucijugis supremis oppo-  
 sitis integerrimis, foliolis lineari-lanceolatis (supremo  
 majore) patentissimis acutiusculis alternatim approxi-  
 matis angulo acuto decurrentibus, ita ut rachis par-  
 tialis alata adpareat transversim parallelo-venosis su-  
 pra glabris viridibus subtus ferrugineis uti rachis pun-  
 ctatis. = 5. *Pt. flavescens* = Colla pl: rar: chil: fasc:  
 VII. ined: t. LXVI. *Pt. incisa* Thb: videtur diversa?  
 Berter: in sched: « *Pt*: tota flavescens glaberrima, ra-  
 » chide planiuscula supra canaliculata, frondibus late  
 » ovatis 2-pinnatis multijugis, pinnis oppositis lan-  
 » ceolatis patentibus multijugis, pinnulis oppositis li-  
 » neari-lanceolatis patentiusculis basi dilatatis sub-  
 » decurrentibus apice sub-arcuatis inferioribus basi  
 » sub-lobatis superioribus integris supremo acuminato  
 » longiori, fructiferis margine revolutis ibique subtus  
 » densissimis, capsulis croceis. » (In sylvis et secus  
 rivulos collium ins: *Juan-Fernandez*). Accedit quidem  
*Pt. incisæ* Thb:, uti observaverat BERTER:, sed differt  
 præsertim colore *flavescenti* nec *glaucescenti* totius  
 plantæ, pinnularum segmentis seu foliolis *ovato-lan-*  
*ceolatis* nec *obtusis* inferioribus *lobatis* nec *integerri-*  
*mis*, soris *confertissimis* nec *sæpe interruptis*, capsulis  
*croceis* nec pallide *cinnamomeis*. = 6. *Pt. microphylla*  
 = Colla l. c. *Pt*:...? Berter: in sched: « *Pt*: rachide  
 » universali longo tractu nuda nitidissima rufescente  
 » antice sulcata partialibus villososquamulosis, fron-

» dibus 3-pinnatis ovatis multijugis alternis ovato -  
 » oblongis erectiusculis 5-10-jugis, pinnis partialibus  
 » alternis ovato - lanceolatis patentiusculis, pinnulis  
 » linearibus obtusis inferioribus rotundato-lobatis su-  
 » perioribus integris superne glabris subtus rufo-squa-  
 » mulosis, soris sub-confluentibus. » (Ad rupes *Chili*).  
 = 7. *Pt. triphylla* = Berter: merc: chil: n. XVI. p.  
 748. « *Pt. rachide tereti glaberrima indivisa, foliolis*  
 » *secus rachidem verticillatim sub-quaternis sessilibus*  
 » *lanceolatis integerrimis mucronatis glabris subtus*  
 » *pallidioribus superioribus interdum solitariis, cap-*  
 » *sulis confluentissimis.* » COLLA l. c. (*Rancagua Chili*).  
 = 8. *Pt. tenera an vera?* = Berter: in sched: Planta  
 sub hoc nomine missa a BERTERO ex sylvis densis mon-  
 tium ins: *Juan-Fernandez* accedit quidem ad *Pt. te-*  
*neram* KAULF: in fronde sec: diagnosim SPR: syst: IV.  
 77., sed videtur differre stipite rachideque *teretius-*  
*culis* nec *angulatis*, indusiis *glabris* nec *ciliatis*. Ce-  
 terum laudata diagnosi nimis manca neque vidi plan-  
 tam KAULF: ut quidquam certi asserere possim.

IX. ASPLENIUM SW: syn: Filic: p. 4. = SPR: syst: n. 3260.  
 = Lam: ill: t. 867. = *Asplenii*, *Acrostichi*, *Pte-*  
*ridis*, *Scolopendrii*, *Trichomanes*, *Polypodii*, *As-*  
*pidii*, *Nephrodii*, *Llaveæ*, *Cænopteridis*, et *Dareæ*  
 spec: nonnullæ quorund:

» Sori lineares venis lateralibus impositis. *Indusia*  
 » membranacea plana versus costam dehiscentia (char:  
 » ex SPR:). » W. est: « Sori lineares transversales  
 » sparsi. *Indusia* e venis lateralibus orta costam ver-  
 » sus dehiscentia. » R. BR: et KUNTH est: « Sori li-



» neares sparsi dorsales. *Involucrum* (*indusium*) e  
 » vena lateraliter ortum ducens margine superiori  
 » libero. »

*Obs:* Genus ex supra allatis adhuc obscurum. Cl:  
 R. Br: inter alios characteres observavit, in veris *Asplenii*s indusium e ramulo superiori venæ ortum semper costam versus esse liberum, verum cum ramo inferiori insideat, quod passim in nonnullis speciebus, iis præsertim quæ fronde indivisa gaudent, occurrit, æque constanter contrariam directionem servare (R. Br: prodr: ed: 2. p. 6. obs: 11.). Constat autem ex Spr: stirpibus 152. per orbem sparsis, inter quas vix 15. europææ.

\* 1. *A. septentrionale* = Sw: syn: Filic: 75. = Spr: syst: IV. 81. = Schk: crypt: 62. t. 65. Sub *Acrosticho* L. sp: 1524. (*Eur:* passim. *Pedem:* nil vulgatus ad rupes montanas ALL: n. 2415. RE fl: segus: p. 84. BIROLI fl: acon: II. p. 147. omnes sub *Acrosticho*. Prope ædem *D. Pancratii* et in *M. Musiné* RE fl: tor: II. p. 182. *Sardin:* ad rupes *Arizzo* MORIS st: sard: I. p. 54.). Perenn: Cæspitosum glabrum, stipites filiformes longissimi, frons ad apicem stipitis sub - 2 - partita laciniis linearibus apice denticulatis, sori confluentes.

2. *A. marinum* = L. sp: 1540. (*Anglia, Hispan:, Gallia, Afr:* bor:, ins: *Canariis*. *Sardin:* ad rupes maritimas litoris orientalis MORIS st: sard: II. p. 12.). Perenn: Glabrum, frons pinnata, rachis marginata, foliola sub-opposita brevissime petiolata oblonga obtuse crenata basi sub-auriculata, sori interrupti.

\* 3. *A. Trichomanes* = L. sp: 1540. = Spr: syst:

IV. 85. = Schk: crypt: 69. t. 74. *A. trichomanoides* All: n. 2395. (*Eur.*, *Asia*, *Amer*: bor: *Pedem*: ubique locis saxosis et ad vias in oris sylvarum, tum etiam e rupium fissuris sive in montibus sive in alpidibus ALL: l. c. RE fl: segus: p. 84. et fl: tor: II. p. 183. In fissuris rupium et ad mœnia urbis *Novariæ* frequens BIROLI fl: acon: II. p. 148. *Sardin*: in humidis umbrosis sylvarum MORIS st: sard: I. p. 54.). Perenn: Glabrum cœspitosum, stipites rachidesque teretes fuscæ nitidæ, frondes lineares pinnatæ, foliola sessilia inferiora alterna superiora opposita omnia sub-rotundo-oblonga tenuissime crenulata, sori sparsi. Variat foliolis eleganter incisissimis, quale in SCHK: l. c. fig: c. f.

\* 4. *A. viride* = Huds: angl: 453. = Spr: syst: IV. 86. = Schk: crypt: 68. t. 73. *Trichomanes ramosum* L. sp: 1541. Moris: hist: III. p. 591. s. 14. t. 3. f. 11. (*Eur*: med: et austr: *Pedem*: passim in alpidibus inter saxorum rimas BELLARD: app: p. 47. In saxosis et umbrosis *M. Cenisii* atque in montibus *Javenensib*: RE fl: segus: p. 84. Ad rupes vallis *Audzasca* BIROLI fl: acon: II. p. 149.). Priori valde affine, sed differt præsertim rachide compressa viridi, foliolis sub-petiolatis oblongioribus evidentius crenatis, soris magis approximatis sæpe confluentibus. *Trichomanes ramosum* L. est simplex var: frondibus duplicato-pinnatis sec: W. sp: V. p. 333. β.

\* 5. *A. germanicum* = Weiss: crypt: 299. = Spr: syst: IV. 86. = *A. alternifolium* Wulf: in Jacq: misc: II. p. 51. t. 5. f. 2. *A. Bregonii* Schk: crypt: 77. t. 81. (*Eur*: med: et austr: *Pedem*: ad *Javenenses* alpes conscendens jugum della *Rossa* similibusque locis in

valle *Lancei* prope *Cantoria*, *Guazzolo* et *Monasterio* BALB: addit: p. 99. sub *A. alternifolio*. RE fl: segus: p. 84. Secus vallem *di Vedrio* ad rupes non frequens BIROLI fl: acon: II. p. 149.). Perenn: Pumilum valde cæspitosum, stipites rachidesque foliiformes, frondes pinnatæ, foliola alterna remotiuscula parva cuneiformia apice inæqualiter incisa inferiora plerumque 2 - 3 - partita, sori parci sub - confluentes.

\* 6. *A. fontanum* = R. Br: prodr: ed: 2. p. 6. in obs: III. = Spr: syst: IV. 86. Sub *Polypodio* L. sp: 1550. = Bolt: fil: 38. t. 21. Sub *Aspidio* W. sp: V. 272. (*Anglia*, *Hungar.*, *Sibir*: *Sabaud*: et *Pedem*: prodit e rupium fissuris prope *Moutiers* et in *M. S. Bernardi*, similibusque locis supra *Ussey* ALL: n. 2413. Vulgare circa *Segusium* et in regione *di Fossimagna* locis umbrosis humidisque RE fl: segus: p. 84. Ad radices *Alpium* BIROLI fl: acon: II. p. 150. omnes sub *Polypodio*). Perenn: Sub-cæspitosum, rachis marginata, frondes lineari-lanceolatæ 2-pinnatæ multijugæ, pinnae brevissime petiolatæ ovato-lineares alternæ paucijugæ, foliola ovata minima incisa, sori demum confluentissimi totam fere paginam inferiorem obducen-tes. Vereor ne planta ALL: pertineat potius ad *A. Halleri* ex syn: HALL: ab Auctore citato, et præsertim ex frondibus reapse 2-pinnatis, nec pinnatis tantum pinnis pinnatifidis uti in descriptionibus Auctorum de *A. fontano*; sed in plantis nostris sori sunt omnino confluentes nec 2-3. tantum in qualibet pinnula, uti de *A. Halleri* affirmat W.

\* 7. *A. Filix foemina* = Spr: syst: IV. 88. ex Bernh: = Sub *Polypodio* L. sp: 1551. = Blackw:



t. 325. aliiue. Sub *Aspidio* Schk: crypt: 58. t. 60. Sub *Athyrio* Roth: germ: III. 65. aliiue. *Polypodium molle* All: Schreb: non Jacq: nec Kunth: (*Eur:* passim. *Pedem:* in sylvis umbrosis collium et montium frequens ALL: n. 2407. BALB: fl: taur: p. 174. RE fl: segus: p. 85. BIROLI fl: acon: II. p. 150. omnes sub *Polypodio*. In collium nemoribus RE fl: tor: II. p. 181. sub *Aspidio*. *Sardin:* in umbrosis humidis vallium MORIS st: sard: I. p. 54.). Perenn: Glabriusculum, varians multimode statura, frondes 2-pinnatæ multijugæ, pinnæ sessiles alternæ late lanceolatæ patentès multijugæ, foliola sessilia opposita lineari-lanceolata plus minus profunde incisa vel denticulata, sori ovato-oblongi 2-seriales approximati demum sæpe sub-confluentes. *Polypodium molle* ALL: n. 2046. quod crescit ad fontium scaturigines et secus lente fluentes aquas alibique (RE fl: segus: p. 85. BIROLI fl: acon: II. p. 151.) est sola var: statura minori, laciniis foliolorum imis 2-fidis. *P. molle* JACQ: exoticum pertinet ad *Aspidium*. *P. molle* KUNTH pariter exoticum spectat ad *P. Olites* L.

\* 8. *A. Ruta muraria* = L. sp: 1541. = Spr: syst: IV. 88. = Schk: crypt: 75. t. 80. b. (*Eur:*, *Amer:* bor: *Pedem:* ubique ad muros vetustos et sepes ALL: n. 2396. RE fl: segus: p. 84. et fl: tor: II. p. 183. BIROLI fl: acon: II. p. 149. *Sardin:* inter fissuras rupium in montibus MORIS st: sard: I. p. 54.). Perenn: Humile glabriusculum, frondes generatim inferne 2. superne 1-pinnatæ, pinnæ alternæ petiolatæ, foliola sub-sessilia rhombeo-oblonga obtuse denticu-

lata, sori sparsi approximati demum confluentes. Valde variat frondis compositione.

9. *A. obovatum* = Viv: fl: cors: p. 16. Spr: syst: IV. 88. (*Corsica* in *M. della Trinità* Viv: l. c. Ad rupes maritimas *Sardin*: frequens MORIS st: sard: II. p. 12.). » *A. fronde lanceolata* 2 - pinnata, pinnis pinnulis- » que exterioribus confluentibus in rachide partiali et » universali decurrentibus ovatis obsolete dentato - » crenatis, soris distinctis raris. » Viv: l. c. Fide cl: MORISII inter sardoas plantam hanc mihi ignotam commemoro.

\* 10. *A. Adiantum nigrum* = L. sp: 1541. = Spr: syst: IV. 89. = Schk: crypt: 74. t. 80. a. (*Eur*: passim, *Carolina*. *Pedem*: locis lapidosis in montibus *di Piossasco* et *di S. Michele della Chiusa*, et ad sepes in agro *Cilianensi* ALL: n. 2397. In lapidosis montanis RE fl: segus: p. 84. Locis editioribus collium ad radices fruticum ac inter saxa BALB: fl: taur: p. 173. In saxosis collium atque in montuosis RE fl: tor: II. p. 183. In umbrosis montium et collium inter saxa vulgare BIROLI fl: acon: II. p. 149. *Sardin*: ad arbores et in umbrosis montium frequens MORIS st: sard: I. p. 54.). Perenn: Stipites rachidesque læves, frons 2-pinnata, pinnæ alternæ ovato-lanceolatae acutæ, pinnulæ alternæ oblongæ pinnati-sectæ inferiores plerumque 2 - pinnatae, segmenta seu foliola ovata obtusa superne denticulata, sori sub - confluentes.

*Species dubiæ vel fortassis novæ.*

11. *A. prolixum* = Mart: in sched: (*Brasil*). « *A.*  
 » fronde 2-pinnata, pinnis sparsis lineari-lanceolatis  
 » acutis, foliolis sessilibus sub-decurrentibus cuneato-  
 » oblongis apice inæqualiter dentatis, soris sub-con-  
 » fluentibus, stipite squamoso, rachide angulata in-  
 » ferne pilosiuscula superne glabra. » NOB: = 12. *A.*  
*macrosorum* = Berter: in sched: (In sylvis densis  
 montium editiorum ad arborum truncos ins: *Juan -*  
*Fernandez*). « *A.* fronde pinnata paucijuga, pinnis  
 » alternis remotiusculis brevi - petiolatis late ovato -  
 » lanceolatis acuminatis glabris basi sub - oblongis  
 » margine inæqualiter crenatis dentatisve, soris lon-  
 » gissimis solitariis, stipite squamoso, rachide com-  
 » pressiuscula sub-angulata nitidissima nigra. » COLLA  
 pl: rar: chil: fasc: VII. ined: t. LXVII. Stirps elegan-  
 tissima. = 13. *A. condrophyllum* = Berter: in sched:  
 (Ad rupes maritimas loco dicto *el Pangual* et in  
*English-bay* ins: *Juan-Fernandez*). « *A.* fronde pin-  
 » nata sterili pauci-fertili multi-juga, pinnis oppo-  
 » sitis alternisve brevissime petiolatis ovato-oblongis  
 » obtusiusculis serratis, fertilibus aliis utrinque albo-  
 » tomentosis aliis glabriusculis viridibus, sterilibus  
 » minoribus concoloribus, soris oblongis solitariis  
 » demum confluentibus, stipite squamis creberrimis  
 » longis fuscis obsito, rachide angulato-compressius-  
 » cula sub-squamulosa. » COLLA l. c. t. LXVIII. Sin-  
 gulare præsertim eo quod in eadem fronde fructifera  
 occurrant foliola dense albo-tomentosa et glabriuscula



viridia. = 14. *A. alatum* = Humb: ? *A. stellatum* Colla  
l. e. t. LXIX. (In sylvis umbrosis mont: edit: ins:  
*Juan-Fernandez*, ita in sched: BERTER:). Planta hæc  
aliquantulum recedit ab *A. alato* ex descr: W. sp: V.  
p. 319., unde dubitanter novam speciem constitui  
quam sic definivi: « *A. stipite* lineari-squamoso, ra-  
» chide lineari-subulata nitida apice radicante ibique  
» stellatim prolifera, frondibus pinnatis multijugis  
» pinnis alternis oblongis obtusiusculis brevissime pe-  
» tiolatis incisissimis lacinia infima sursum majori apice  
» 2-3-dentata, soris linearibus. » = 15. *A. unilate-*  
*ræ* = Nob: *A. sp:* nov: Mart: in sched: (*Brasil:*).  
» *A. fronde* simpliciter pinnata, foliolis unilaterali-  
» bus brevi - petiolatis lanceolatis longissime acumi-  
» natis argute serratis longitudinaliter venosis, soris  
» linearibus erectis utrinque ad nervum medium al-  
» ternatim dispositis, stipite squamoso, rachide te-  
» tragona nitida inferne uno latere squamulosa. » Nob:

X. *SCOLOPENDRIUM* Smith: act: taur: V. p. 410. t. 9. f. 2.  
= Spr: syst: n. 3255. = *Asplenii* et *Hemionitidis*  
spec: nonnullæ quorund:

» *Sori* lineares obliqui. *Indusia* geminata sutura  
» longitudinali dehiscencia, altero e ramulo superiori  
» venæ, altero ab inferiore venæ proxime orto. »

*Obs:* Genus artificialiter ab *Asplenio* sejunctum,  
habitu tamen ob frondes constanter *simplices* satis  
distinctum, constans 4. stirpibus, quarum 2. europææ,  
1. asiatica, altera americana.

\* 1. *Sc: officinarum* = Sm: l. c. = Spr: syst: IV.  
69. = Schk: crypt: 78. t. 83. Sub *Asplenio* L. sp:

1537. alique (*Eur*: passim. *Pedem*: locis umbrosis saxosis præsertim secus fluentes aquas ad montium et alpium radices, ad oras etiam puteorum et fontium scaturigines in agro *di Sciolze* et *Candeil* *ALL*: n. 2393. Locis umbrosis ad muros vineæ *Lapié*, ac in caveis horti magni *Valentini* secus *Padum* atque in *M. Musiné* *RE* fl: tor: II. p. 183. Ad radices montium et collium et valle *Ticini* ad aquæductus vulgare *BIROLI* fl: acon: II. p. 148. omnes sub *Asplenio*. *Sardin*: in humidis sylvis *Barbagie* *MORIS* st: sard: I. p. 54.). Perenn: Stipes paleaceus rachidesque hirsutiusculæ, frons simplex glabra late lanceolata basi cordata apice obtusa. Variat frondibus crispis (*Sc: crispum*  $\beta$  *W.*, *MORIS*: hist: III. p. 557. s. 14. t. 1. f. 5.); mucronatis (*Sc: mucronatum*  $\gamma$  *W.*, *MORIS*: l. c. t. 1. f. 9.); apice dedaleis (*Sc: dedaleum*  $\delta$  *W.*, *MORIS*: l. c. t. 1. f. 2.); apice multifidis (*Sc: multifidum*  $\epsilon$  *W.*, *MORIS*: l. c. t. 8.); stipite ramoso, fronde divisa apice undulata (*Sc: ramosum*  $\zeta$  *W.*, *TOURN*: inst: t. 320.); fronde basi cordato-sagittata (*Sc: sagittatum*  $\eta$  *W.*, *MORIS*: l. c. p. 560. t. 1. f. 1.).

2. *Sc: Hemionitis* = *Cav*: ann: des sc: nat: V. p. 150. t. 41. f. 2. Sub *Asplenio* *L.* sp: 1536. *Hemionitis peregrina* *MORIS*: hist: III. p. 560. s. 14. t. 1. f. 2. alique (*Ital*., *Hispan*: *Sardin*: ad rupes *S. Tenera*, *Cagliari* *MORIS* st: sard: I. p. 54.). Differt a priori statura majore, stipite lævi, fronde cordato-hastata sub-lobata.

XI. *ASPIDIUM* Sw: synops: Filic: 3. = W. sp: V. p. 911.  
 = Spr: syst: n. 3267. = *Polypodii*, *Oleandræ*,  
*Nevroniæ*, *Tectariæ*, *Nephrodii*, *Pteridis*, *Ophyo-*  
*glossi*, *Polystichi*, *Acrostichi*, *Callipteridis*, *Cyatheæ*,  
 et *Achyrii* spec: nonnullæ Auctor:

» Sori sub-rotundi dorsales sparsi. *Indusium* orbi-  
 » culare peltatum in medio soro insertum, vel (in  
 » *Nephrodio*) reniforme latere affixum marginibus li-  
 » berum. »

*Obs:* Genus facile confundendum cum *Polypodio*,  
 sed præsentia indusii etsi minutissimi satis distinctum  
 et rite ab eo sejunctum, numerosissimis constans stir-  
 pibus (163. ex SPR: incluso *Nephrodio* R. BR:) fere  
 omnibus exoticis, 16. circiter tantum europæis.

\* 1. *A. Lonchitis* = Sw: syn: Filic: 43. = Spr:  
 syst: IV. 97. = Schk: crypt: 29. t. 29. Sub *Poly-*  
*podio* L. sp: 1548. Fl: dan: t. 497. aliique. Sub *Po-*  
*lysticho* Mérat nouv: fl: de Paris ed: 3. tom: I. p. 373.  
 (Eur: passim. *Pedem:* locis lapidosis et umbrosis mon-  
 tium et alpium frequens ALL: n. 2399. Abunde in *M.*  
*Cenisio* et supra *il Bosco nero* RE fl: segus: p. 84.  
 Ad oras sylvarum in montanis et alpinis non raro  
 occurrit BIROLI fl: acon: II. p. 150. omnes sub *Poly-*  
*podio*). Perenn: Elatiusculum, stipes rachidesque squa-  
 mosæ, frons simpliciter pinnata multijuga, foliola op-  
 posita approximata lanceolato - falcata basi superiore  
 auriculata spinuloso-serrata mucronulata subtus squa-  
 mulosa, sori globosi 2-seriales demum confluentes.

\* 2. *A. Oreopteris* = Sw: syn: Filic: 50. = Spr:  
 syst: IV. 101. = Schk: crypt: 37. t. 35. 36. Sub



*Polypodio* Ehrh: crypt: n. 22. Fl: dan: t. 1121. *P. limbospermum* All: auct: p. 49. Sub *Polysticho* MÉRAT l. c. p. 574. ex DC. (*Eur*: passim. *Pedem*: in montibus *Javenensib*: , alpinis *Monregalensib*: ALL: l. c. c. descr: Abunde in monte *Bsimauda* supra *Bovisium* ad radices sylvarum, in montibus circa *Chartusiam Pesii*. *Sabaud*: signatim prope *Chamony* BELLARD: act: taur: V. p. 253. Frequens in castanetis *di Giaveno* et secus *il Sangone* RE fl: segus: p. 85. In summitate vallis *Salicum* prope sacellum *D. Jacobi* versus *Eremum*, et in valle dicta *Patonera* RE fl: tor: II. p. 180.). Perenn: Elatum, stipes basi sparse squamosus, rachides læves, frons simpliciter pinnata multijuga, pinnæ sub-oppositæ remotiusculæ lineari-lanceolatae patentibus subtus resinoso-glandulosæ pinnatisectæ, segmenta ovato-lanceolata integerrima obtusa, sori globosi marginales minimi, indusia caduca.

\* 3. *A. Thelypteris* = Sw: syn: flic: 50. = Spr: syst: IV. 104. = Schk: crypt: 51. t. 52. Sub *Polypodio* L. mant: 505. Fl: dan: t. 760. aliique. Sub *Acrosticho* L. sp: 1528. Sub *Polysticho* Mérat l. c. ex DC. (*Eur:*, *Afr:* bor: et austr:, *Amer:* bor: *Pedem:* abunde circa lacum *di Candia* et *Vivrone*, in agro etiam *Vercellensi* locis palustribus frequens ALL: n. 2414. In summa valle *Salicum* in collibus *Taurin:* ac prope *la Mandria* locis aquosis RE fl: tor: II. p. 180. Circa *Avilianæ* lacum RE fl: segus: p. 85. Ad aquæductus vallis *Ticini* et collium *BIROLI* fl: acon: II. p. 150. omnes sub *Polypodio*). Differt a priori, cui valde affine, præsertim stipite *nudo*, pinnis utrinque

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*glabris*, segmentis valde *minoribus* et *acutis*, soris *contiguis* demum *confluentibus*.

\* 4. *A. cristatum* = Sw: syn: filic: 52. non Huds: = Spr: syst: IV. 104. = Schk: crypt: 39. t. 37. Sub *Polypodio* L. sp: 1551. aliiue. *P. Callipteris* Ehrh: Beitr: III. p. 77. Sub *Polysticho* Roth: germ: III. 84. Sub *Neplrodio* Michx: amer: II. p. 269. (*Eur.*, *Amer.* bor: *Pedem.*: in sylvis umbrosis montanis et subalpinis ALL: n. 2403. In *M. Cenisio* RE fl: segus: p. 85.). Perenn: Stipes rachidesque squamosæ, frons simpliciter pinnata multijuga, pinnæ alternæ remotæ ovato-oblongæ basi sub-cordatæ patentiusculæ glabræ pinnatisectæ, segmenta oblonga obtusissima denticulato-serrulata, sori globosi 2-seriales approximati nondum tamen reapse confluentes.

\* 5. *A. aculeatum* = Sw: syn: filic: 53. = Spr: syst: IV. 105. excl: syn: Huds: et Sw: = Schk: crypt: 41. t. 39. et 42. t. 40. Sub *Polypodio* L. sp: 1552. aliiue non Huds: *P. setiferum* Forsk: descr: 185. Sub *Polysticho* Roth: germ: III. 79. DC. (*Eur.*, *Afr.* bor: et austr: *Pedem.*: locis lapidosis et umbrosis montium et alpium frequens ALL: n. 2400. Locis umbrosis ad oras sylvarum in collibus *Taurinensib.*; in sylvis *Alpiniani* alibique RE fl: tor: II. p. 180. Vulgare in sylvis umbrosis RE fl: segus: p. 85. Ad *Ticini* declivem et in collibus locis umbrosis vulgare BIROLI fl: acon: II. p. 151. omnes sub *Polypodio*. *Sardin.*: in umbrosis montanis MORIS st: sard: I. p. 53.). Perenn: Stipes rachidesque densissime squamosæ, frons 2-pinnata multijuga, pinnæ alternæ sub-approximatæ lanceolatæ acutæ patentiusculæ, foliola alterna valde ap-

proximata ovata sub-falcata aculeato-serrulata mucronata, sori sub-globosi demum valde confluentes.

\*? 6. *A. lobatum* = Sw: syn: filic: 53. = W. sp: V. 260. = Pluk: alm: 151. t. 180. f. 3. Sub *Polypodio* Huds: angl: 459. non L. *A. aculeatum* Spr: syst: IV. 105. male (In *Angliæ* umbrosis. *Pedem:* sec: BALB: el: p. 3.). Priori simile, sed diversum momente W. l. c., pinnulis ovatis non falcatis obtusis mucrone longo aristatis basi sursum auriculatis rigidioribus. Vereor ne cl: BALB: stirpem hanc, quam non possideo, commutaverit cum *P. aculeato*.

\* 7. *A. Filix mas* = Sw: syn: filic: 55. = Spr: syst: IV. 105. = Schk: crypt: 45. t. 44. Sub *Polypodio* L. sp: 1551. Blackw: t. 323. aliique. Sub *Polysticho* Mérat l. c. tom: I. p. 373. ex DC. (*Eur:*, *Asia*, *Afr:* bor: *Pedem:* in sylvis sub-humidis umbrosis collium et montium passim ALL: n. 2404. RE fl: segus: p. 85. BIROLI fl: acon: II. p. 150. omnes sub *Polypodio*. RE fl: tor: II. p. 181. *Sardin:* ad rupes in montibus MORIS st: sard: I. p. 53.). Duobus præcedentibus affine, sed differt præsertim pinnis parum remotioribus, versus apicem sub-falcatis, foliolis angustioribus obtusis nec mucronatis nec falcatis, serratis equidem sed serraturis muticis, soris majoribus paucioribus haud confluentibus.

\* 8. *A. dilatatum* = Sw: syn: filic: 420. = Spr: syst: IV. 106. = Müll: fried: n. 845. t. 2. f. 4. Sub *Polypodio* Hoffm: germ: II. 7. *P. aristatum* Vill: delph: III. p. 844. et Bellard: app: p. 49. non Forst: *P. cristatum* Huds: angl: 457. Bolt: fil: 42. t. 23. non Sw: Sub *Polysticho* Mérat l. c. tom: I. p. 374.



ex DC. (*Eur: med: Pedem: non infrequens in sylvaticis umbrosis Alpium, copiose in sylvis prope lacum M. Cenisii* BELLARD: l. c. In sylvis *della Mandria* prope *Sturam* ac in nemoribus *Stupinixii* BALE: fl: taur: p. 174. Ad radices collium *di Romagnano* BIROLI fl: acon: II. p. 151. omnes sub *Polypodio aristato*. RE fl: tor: II. p. 181. sub *A. dilatato*). Perenn: Stipes rachidesque squamulosæ, frons 2-pinnata multijuga glabra, pinnæ sub-oppositæ remotæ ovato-lanceolatae acutæ patentēs, pinnulæ ovato-oblongæ inferiores alternæ remotiusculæ superiores sub-oppositæ approximatae sub-decurrentes omnes profunde pinnatisectæ, segmenta oblonga mucronato-serrata, sori rotundati sparsi indusiis lævibus. *P. aristatum* FORST: prodr: n. 448. (*Aspidium* Sw:) planta diversa ex insulis maris *Pacifici*.

\* 9. *A. rigidum* = Sw: syn: filic: 53. = Spr: syst: IV. 106. = Schk: crypt: 40. t. 38. Sub *Polypodio* Hoffm: germ: II. 6. *P. fragrans* Vill: delph: III. p. 843. excl: synonym: *P. Villarii* Bellard: app: p. 49. Sub *Polysticho* DC. (*Eur: med: Pedem: inter diffractos lapides a planitie S. Nicolai ad scalam M. Cenisii* BELLARD: l. c. RE fl: segus: p. 85. *Sardin: in umbrosis montanis* MORIS st: sard: II. p. 12.). Perenn: Stipes rachidesque longe squamosæ, frons 2-pinnata oblongo-lanceolata multijuga glabra, pinnæ sub-alternæ remotiusculæ lanceolatae acutæ sub-erectæ, pinnulæ sub-oppositæ cordato-lanceolatae pinnatifido-dentatae laciniis obtusis mucronulato-sub-2-dentatis, sori rotundati 2-seriales distincti. *Polypodium fragrans* L. (*Aspidium* Sw:) est alia planta e *Sibiria*.

\* 10. *A. fragile* = Sw: syn: filic: 58. = Spr: syst: IV. 107. excl: speciatim *P. Pontedera* All: = Schk: crypt: 53. t. 54. 55. 56. Sub *Polypodio* L. sp: 1553. Fl: dan: t. 401. aliique (*Eur.*, *Amer.*: bor: et austr., ins: *Canar.*: *Pedem.*: locis montanis inter saxa secus vias, locis umbrosis collium *Canapiciens*: ALL: n. 2411. Ad muros et inter saxa RE fl: segus: p. 85. Secus vias ad arbusculorum radices ac ad muros BALB: fl: taur: p. 175. In montanis ad rupes umbrosas in sylvis et ad muros BIROLI fl: acon: II. p. 151. omnes sub *Polypodio*. RE fl: tor: II. p. 182. sub *Aspidio*. *Sardin*: ad rupes in montibus MORIS st: sard: I. p. 53.). Perenn: Generatim pumilum gracile fragile, statura tamen valde varians, stipes rachidesque basi sub-squamosæ ceterum glabræ, frons 2-pinnata, pinnæ suboppositæ remotæ ovato-oblongæ patentēs, pinnulæ alternæ ovatæ obtusæ inciso-serratæ serraturis obtusiusculis, sori rotundati parvuli sparsi indusiis lateralibus. Planta polymorpha.

\* 11. *A. Pontederæ* = W. sp: V. 273. = Sub *Polypodio* All: n. 2405. = Segu: veron: suppl: 54. t. 1. f. 2. (*Pedem.*: in sylvis umbrosis ad thermas *Vinadii* ALL: l. c.). Confusum cum præcedenti a cl: SPR:, differt præsertim frondibus simpliciter pinnatis, pinnis lanceolatis pinnatifidis, laciniis lanceolatis acutis serratis infima superiore longiore, soris oblongis.

\* 12. *A. rhæticum* = Sw: syn: filic: 59. = Spr: syst: IV. 107. = Sub *Polypodio* L. sp: 1552. aliique. Sub *Aspidio fragile* var:  $\beta$  DC. fl: fr: n. 1417. (*Hungar.*, *Helvet.*, *Gallia*. *Pedem.*: frequens ad vias profundas inter saxa in collibus et montibus atque sæpe

prodit e rupium fissuris locis subalpinis ALL: n. 2408. sub *Polypodio*. Cum *P. fragile* BIROLI fl: acon: II. p. 151.). Duobus præcedentibus simile; frondibus 2-pinnatis accedit magis ad *P. fragile*, cujus fors var., sed differt pinnis *remotioribus*, pinnulis *lanceolatis acuminatis* nec *ovatis obtusis* profundius incisissimis immo *pinnatifidis*, laciniis *linearibus*.

\* 13. *A. regium* = Sw: syn: filic: 58. = Spr: syst: IV. 107. Sub *Polypodio* L. sp: 1553. aliique = *P. polymorphum* var: C. Vill: dauph: III. p. 847. t. 53. f. C. *Cyathea incisa* Engl: bot: t. 163. (*Anglia, Gallia. Pedem:* locis saxosis ad fontium scaturigines inter *Giaveno* et *Quasse* ALL: n. 2412. excl: syn: VAILL: sec: DC. fl: fr: suppl: p. 240. RE fl: segus: p. 83. omnes sub *Polypodio*). *A. fragili* pariter affine, sed omnibus partibus *glabris*, pinnulis *ovato-oblongis lobato-pinnatifidis*, laciniis *lineari-oblongis sub-integerrimis*, soris *minutissimis* satis distinctum.

\* 14. *A. alpinum* = Sw: syn: filic: 60. = Spr: syst: IV. 109. = Schk: crypt: 60. t. 62. a b. Sub *Polypodio* Jacq: ic: rar: III. t. 642. aliique (*Alpib: Eur: med: Pedem:* in editioribus rupibus *alpinum Savinæ, M. Cenisii* et *vallis di Locana*, in *alpibus di Viù* et *Ussey* ALL: n. 2409. RE fl: segus: p. 85.). Perenn: Gracile undique *glabrum*, frons 3-pinnata oblonga, pinnæ sæpius alternæ remotæ ovatæ patentés, pinnulæ oblongæ pinnatæ vel pinnatifidæ, foliola seu laciniæ lineares denticulatæ, sori versus apicem foliolorum vel laciniarum solitarii indusiis lateralibus.

\* 15. *A. montanum* = Sw: syn: filic: 61. = Spr: syst: IV. 109. = Schk: crypt: 61. t. 63. Sub *Poly-*



*podio* Haenk: in Jacq: coll: II. p. 46. aliique. *P. myrrhidifolium* Vill: dauph: III. p. 851. t. 53. (*Eur: bor: et med: Pedem: locis umbrosis humidis M. Cenisii*, supra *Groscaval* et circa *Pralugnan* ALL: n. 2410. *Sestrieres* RE fl: segus: p. 85. In valle di *Antrona* supra *S. Petrum* unice BIROLI fl: acon: II. p. 150. omnes sub *Polypodio*). Vix differt a priori frondibus tripartito-decompositis *triangularibus*, pinnis *oppositis*, quæ omnia ei habitum quodammodo diversum tribuunt, demum stipite basi *sub-paleacco*.

*Species dubia vel nova.*

16. *A. Berterianum* = Colla pl: rar: chil: fasc: VII. ined: t. LXX. *A. expansum* W.? Videtur diversum Berter: in sched: (Ad saxa et arborum radices et sylvis collium ins: *Juan-Fernandez*). « *A. stipite re-*  
 » *pente* (*caudex repens* BERTER: in sched:) rachidi-  
 » *busque squamulosis*, fronde alternatim 2 - pinnata  
 » *ovata*, pinnis ovato-lanceolatis sub-erectis duabus  
 » *inferioribus majoribus expansis*, pinnulis lanceolato-  
 » *linearibus acutis inferioribus pinnati-sectis mediis*  
 » *dentatis superioribus integris*, segmentis ovato-ob-  
 » *longis obtusiusculis superne glabriusculis subtus fer-*  
 » *rugineis*, inferioribus rotundato-dentatis superiori-  
 » *bus integris*, soris marginalibus globosis. » Non:  
 Ex descr: W. sp: V. 284. stirps Berteriana differt a  
 planta W. foliolis *ovato-oblongis* nec *oblongo-lanceo-*  
*latis* subtus *tomentosis* nec *glabris* ac præsertim soris  
*globosis* non *oblongis*. Stirps pulcherrima, sori *panici-*  
*miliacei* fere duplo majores solitarii versus apicem vel

in divisione venulæ inserti fere totum eorum marginem inferiorem tegunt quin confluant. = 17. *A. sub-incisum* = Nob: *Polypodium sub-incisum* W.? An *P. glandulosum* Desv.? An *Aspidii* sp: indusium enim sat evidens? Berter: in sched: (*Guadalup:*). « *A. glaber-*  
 » rimum, rachide angulata, fronde pinnata amplissima  
 » multijuga, pinnis alternis sessilibus lanceolatis acutis inferioribus pinnatifidis superioribus dentatis  
 » summis sub-integerrimis confluentibus, laciniis ovato-oblongis sub-falcatis acutis argute serratis,  
 » soris sub-rotundis indusiis orbiculatis solitariis ultra medium venularum affixis. » Nob: Planta præsentia indusii certe a *Polypodio* excludenda; habitu quadrat cum *P. sub-inciso* W. si excipias frondes inferiores evidenter pinnatas nec pinnatifidas tantum; sed a *P. glanduloso* Desv., ad quod illam spectare dubitavit BERTER:, toto cœlo diversa. Stipes deest in specim:

XII. ALLOSURUS Spr: syst: n. 3247. ex Bernh: = *Onocleæ*, *Osmundæ*, *Pteridis*, *Cryptogrammæ*, et *Cheilanthes* spec: nonnullæ quorund:

» Sori venis furcatis transversalibus impositi dorsum frondis contractæ demum tegentes. Caps: pedicellatæ. Indusium simplex marginale continuum angustissimum (Char: ex SPR:). »

Obs: Genus constans 4. stirpibus, quarum 1. tantum europæa.

\* 1. *A. crispus* = Spr: syst: IV. 65. ex Bernh: = Sub *Osmunda* L. sp: 1512. = Fl: dan: t. 496. aliæque. Sub *Pteride* Sw: syn: fil: 101. Schk: crypt: 90.

t. 98. aliique. Sub *Onoclea* Hoffm: germ: II. p. 11. (Eur: passim. *Pedem*: in scopulosis Alpium, in montibus *Bugellensib*:, *Vinadii* et *Valderii* frequentissima ALL: n. 2392. sub *Pteride*. In saxosis montium *Javenensium*, atque in *M. Cenisio* in convalle supra *la Novalesa* RE fl: segus: p. 84. sub *Osmunda*. Ad rupes alpinas vulgaris BIROLI fl: acon: II. p. 147. sub *Pteride*). Perenn: Glaber, frondes steriles 2-pinnatæ pinnulis pinnatifidis laciniis obovato - cuneatis subdentatis, frondes fertiles inferne 3 - superne 2-pinnatæ pinnulis lineari-oblongis integerrimis a fructificatione prorsus contractis.

XIII. BLECHNUM Lin: gen: ed: Schreb: n. 1627. excl: paucis stirpib: = Spr: syst: n. 3262. = Lam: ill: t. 869.

» Sori lineares longitudinales continui costæ frondis  
» utrinque paralleli. *Indusium* superficialium continuum versus costam dehiscens. »

*Obs*: Genus ab affinibus tum fructificatione cum habitu facile distinguendum, constans 30. circiter stirpibus exoticis, frondibus simplicibus pinnatifidis, vel simpliciter pinnatis numquam decompositis, foliolis elongatis. Inter species herbarii mei dubia mihi est planta missa a BERTERO sub nomine *Bl: ciliati* cum dubitationis signo; exhibet autem frondes pinnatas glabriusculas foliolis sessilibus inferioribus ovato-subrotundis basi oblique cordatis sub-sterilibus superioribus sub - alternis hastato - lanceolatis obtusiusculis basi superne auriculatis perfecte fertilibus, stipitem rachidesque basi squamoso - pilosas. Ludere videtur



inter *Bl: ciliatum* PRESL: et *hastatum* KAULF:, ejus forsitan var:, sed differt ab utroque statura minori, foliolis utrinque *glabriusculis* nec ciliatis uti in primo, nec subtus ferrugineo-villosis uti in altero, *obtusiusculis* nec mucronatis ut in utroque.

XIV. LOMARIA W. in mag: d. ges: naturf: fr: z. Berl: 1809. p. 160. = Spr: syst: n. 3245. = *Steganiæ*, *Onocleæ*, *Osmundæ*, *Struthiopteridis*, *Blechni*, *Pteridis*, *Acrostichi*, *Anemiæ*, et *Hemionitidis* spec: nonnullæ quorund:

» *Sori* lineares continui dorsum frondis contractæ  
» tegentes. *Indusia* marginalia conniventia. »

*Obs:* Genus vix a præcedenti distinctum, habitu tamen fere proprio sc: referens frondes constanter distinctas alias fertiles alias steriles sæpius inter se diverse sectas, constans 45. stirpibus ex SPR: exoticis, 1. tantum europæa.

\* 1. *L. Spicant* = Spr: syst: IV. 62. ex Desv: = Sub *Osmunda* L. sp: 1522. = Fl: dan: t. 99. aliique. Sub *Onoclea* Hoffm: germ: II. p. 11. Sub *Struthiopteride* Weis: crypt: 287. Sub *Blechno* Méral nouv: fl: de Paris ed: 3. tom: I. p. 370. *Bl: boreale* Sw: syn: fil: 115. Schk: crypt: 102. t. 110. aliique (*Eur.*, ins: *Canar:* *Pedem:* in sylva vallis *Ursinæ Tetonoir* dicta inter *Chamony* et *Chalanches*, in alpibus *de Notre Dame de la Gorge*, supra *Giaveno*, et in montibus supra *Roburent* frequens, incolit vero præsertim loca lapidosa in sylvis castanearum ALL: n. 2390. sub *Struthiopteride*. In castanetis editioribus RE fl: segus: p. 84. sub *Osmunda*. Ad rupes umbrosas montium

vulgaris BIROLI fl: acon: II. p. 148. sub *Blechno*. *Genue* in sylva *Doria a Pegli*, in via inter *Voltri* et *l'Acqua Santa*, tum in orientali plaga *Liguriæ* prope *Rapallo* ad radices montis *Rua* in viæ marginibus BERTOL: am: ital: p. 212. sub *Blechno boreale*, *Sardin*: ad rivulos in editis montibus *Genargentu* MORIS st: sard: I. p. 54.). Perenn: Stipes rachidesque basi squamosæ, frondes ex eodem stipite plures late lanceolatae steriles profunde pinnati-sectæ segmentis late lanceolatis obtusiusculis fertiles duplo altiores pinnatæ pinnis alternis linearibus acuminatis fructificatione contractis.

*Species dubiæ vel novæ.*

2. *L. lanceolata* = Spr: syst: IV. 62. Sub *Stegania* R. Br: prodr: ed: 2. p. 8. Habeo sub primo nomine cum dubitationis signo plantam lectam a BERTERO ad saxa et arborum radices in sylvis collium ins: *Juan-Fernandez*, quæ non videtur differre a planta BROWNI nisi frondis fertilis foliolis non reapse *patentibus* sed *erectiusculis* ac *sub-falcatis*. = 3. *L. cycadifolia* = Colla pl: rar: chil: fasc: VII. ined: t. LXXI. *L. magellanica* an diversa? Berter: in sched: (In sylvaticis collium et montium ins: *Juan-Fernandez*). « *L. elata*, stipite » rachide costisque subtus rufo-squamosis, frondibus » pinnatis late ovatis multijugis, sterilis pinnis alternis sessilibus lineari-lanceolatis obtusis patentibus » coriaceis planis basi omnibus æqualibus, fertilis oppositis sessilibus linearibus cuspidatis erectis marginibus subtus revolutis. » Nob: Stirps elegantissima;

caudex 3 - 5 - pedalis ex BERTER: in scheda; frondes steriles *Cycadem circinnalem*, fertiles *revolutam* effingunt. Differt a *L. magellanica* DESV: foliolis frondis sterilis omnibus basi æqualibus nec inferioribus *cordatis* superioribus *basi attenuatis*, fertilis evidentissime *cuspidatis*. = 4. *L. chilensis* = Kaulf: Videtur diversa? Berter: in scheda (In fruticetis et sylvis collium ins: *Juan - Fernandez*). Diagnosis KAULF: apud SPR: syst: IV. 65. nimis manca ut comparationis ope distinguere valeam plantam Berterianam a *chilensi*; foliola frondis sterilis sunt late lanceolata sub-falcata et omnia habent eandem directionem nec infimas *deflexas* video, margine *repando-dentata* nec apice tantum *denticulata*; foliola frondis fertilis sunt prorsus linearia duplo longiora et magis falcata. = 5. *L. Schottii* = Colla pl: rar: chil: fasc: VII. ined: t. LXXII. *L. n. sp: lanceolatae proxima?* Berter: in sched: (In sylvis densis montium editiorum ins: *Juan-Fernandez*). » *L. stipite arboreo serpente alte scandente rachide-*  
» *que basi squamosis, frondibus ovato-oblongis, sterili*  
» *profunde pinnati-secta segmentis lanceolatis acutis*  
» *basi dilatatis tenuissime serrulatis glaberrimis glau-*  
» *cis patentissimis infimis abbreviatis semi-orbicula-*  
» *ribus, fertili pinnata pinnis linearibus elongatis a-*  
» *cutis sub-falcatis inferioribus oppositis superioribus*  
» *alternis supremo longissimo erecto.* » A *L. lanceo-*  
*lata*, cui proximam dixit BERTER:, differt statura un-  
*dique majori*, frondibus *ovato-oblongis* nec *lanceolatis*,  
*laciniis frondis sterilis rectis* nec *sub-falcatis* margine  
*tenuissime serrulatis* nec *crenulato - repandis*, pinnis  
frondis fertilis *sub-falcatis erectiusculis* nec *patulis*.



XV. STRUTHIOPTERIS W. in mag: d. ges: naturf: fr: z.  
Berl: 1809. p. 160. = Spr: syst: n. 3246. = *Osmundæ* et *Onocleæ* spec: alior:

» Sori lineares decussati demum dorsum frondis  
» contractæ tegentes. *Caps*: pedicellatæ aggregatæ. *Indusium* duplex, commune marginale interius laciniatim dehiscens, partialia septiformia. »

*Obs*: Structura indusii distinguit præsertim ab affinibus genus hocce habitum præcedentis referens et constans ex SPR: unica stirpe sequenti, ad hanc pro var: amandata *St: pensylvanica* W.

\* 1. *Str: germanica* = W. en: 1071. sp: V. 288. = Spr: syst: IV. 65. *Osmunda Struthiopteris* L. sp: 1522. = Fl: dan: t. 169. aliique. *Onoclea Struthiopteris* Sw: syn: fl: III. aliique (*Eur*: , *Amer*: bor: , *Asia*. *Pedem*: secus flumen *Corsalia* in montibus *Regalensib*: , et secus flumen *Sangon* prope *Giaveno*, in pascuis humidis prope *Civasso* ALL: n. 2389. sub *Str: Filicastro*. Secus aquas in locis umbrosis RE fl: segus: p. 84. sub *Osmunda Struthiopteride*. Secus *Sturam* prope *il Parco* locis pinguibus umbrosisque BALBIS fl: taur: p. 172. sub eadem et RE fl: tor: II. p. 182. sub *Str: germanica* ). Perenn: Glabra, frons sterilis pinnata pinnis alternatim approximatis lanceolatis patentibus pinnatifidis laciniis ovatis obtusis vel acutis, frons fertilis pinnata pinnis oppositis linearibus integerrimis ex fructificatione omnimodo contractis, indusiis magis minusve segregatis. Cl: W. l. c. distinguit *Str: pensylvanicam* laciniis obtusis , infima longiore

*acuta*; in plantis pedemontanis promiscue occurrunt lacinia acutæ vel oblongæ.

Trib: II.

NUDÆ (Sori indusio destituti.

Genera 12.).

XVI. ACROSTICUM Lin: gen: ed: Schreb: n. 1625. excl: variis stirpib: = Spr: syst: n. 3234. = Lam: ill: t. 865.

» Sori amorî'i, seu *capsulæ* sparsim glomeratæ  
» frondis paginam inferiorem omnem vel partem occupantes interdum squamulis vel setis interstinctis. »

*Obs:* Genus nunc constans 66. stirpibus ex Spr:, omnibus exoticis, nonnullis europæis ad alia genera amandatis. Quædam occurrunt cultæ in calidariis nostris ornamenti vel curiositatis gratia, inter quæ excellit *A. alcicorne* = Sw: syn: fil: 12. (*Afr:* tropic:, *Java*, *N. Holl:*). Perenn: Frondes carnosæ primordiales reniformes sub-lobatæ cotyledoneæ steriles emittentes frondem fertilem elongatam basi cuneatam subtus tenuissime lanuginosam superne dichotome furcatam laciniis demum pendulis, capsulis glomeratis rubescentibus tectis; stirps speciosissima.

*Species dubia vel nova.*

*A. intermedium* = Berter: in sched: (*Guadalupa*).  
» *A. frondibus pinnatis, foliolis omnibus coriaceis*

» alternis petiolatis lanceolatis integerrimis obtusis,  
 » inferioribus sterilibus, superioribus fertilibus fru-  
 » ctificatione continua soris interstinctis tectis. » Not:  
 Ludit inter *A. aureum* L., quod etiam possideo ex  
 BERTERO, et *A. speciosum* W., sed differt ab utroque  
 præsertim foliolis omnibus *petiolatis obtusis*.

XVII. GYMNOGRAMME Spr: syst: n. 3236. ex Desv: = *Hemionitidis*, *Asplenii*, *Scolopendrii*, *Grammitidis*,  
*Ceterach*, *Pteridis*, *Acrostichi*, *Notholænæ*, *Polypodii*, et *Cincinalidis* spec: nonnullæ quorund:

» *Capsulæ* venis frondis furcatis insidentes. »

Obs: Genus prorsus artificiale, constans ex SPR: 34.  
 stirpibus a frondis pagina inferiore hirsuta, vel fari-  
 nosa vel nuda in 3. sectiones distinctis, inter quas  
 2. tantum europææ.

\* 1. *G. Ceterach* = Spr: syst: IV. 38. = Sub  
*Asplenio* L. sp: 1539. = Blackw: t. 216. aliique. Sub  
*Scolopendrio* Sm: brit: III. p. 1134. Sub *Grammitide*  
 Sw: syn: fil: 23. *Ceterach officinarum* W. en: 1068.  
 sp: V. p. 136. Vern: *Erba dorà* (Eur: passim. *Pedem*:  
 frequentissima ad rupes et muros locis montanis et  
 collinis ALL: n. 2394. RE fl: segus: p. 84. In muris  
 vineæ *Reginæ* et in valle *Salicum* BALB: fl: taur: p.  
 173. Ad rupes apricas collium et montium vulgaris  
 BIROLI fl: acon: II. p. 148. omnes sub *Asplenio*. In  
*M. Musiné* RE fl: tor: II. p. 178. sub *Ceterach offi-*  
*cinale*. *Sardin*: ad veteres muros et ad rupestria MORIS  
 st: sard: I. p. 54.). Perenn: Pumila, stipes rachides  
 frondesque subtus aureo-squamosæ, frondes lineari-



lanceolatæ profunde pinnatisectæ segmentis alternis ovato-rotundatis.

\* 2. *G. leptophylla* = Spr: syst: IV. 40. ex Desv: = Sub *Polypodio* L. sp: 1553. = Magn: monsp: 5. t. 5. Sub *Asplenio* Cav: ann: sc: nat: V. p. 13. t. 41. f. 3. Sub *Grammitide* Sw: syn: fl: 23. et 218. t. 1. f. 6. et W. sp: V. 143. Sub *Acrosticho* DC. fl: fr: n. 1432. (Eur: austr: *Pedem*: circa oppidum di *Piverone* prope locum dictum *le Moline di Palazzo* BALB: *de Crepide* p. 5. Habeo ex hb: BIROLI in agro *Canapiciensi* prope *Bolengo* secus viam lectum a D. NEGRO. *Sardin*: ad rupes in montibus MORIS st: sard: I. p. 54.). Præcedenti omnibus partibus humilior, frons 2-pinnata tenerrima glaberrima, pinnæ alternæ ovatæ, foliola minima cuneiformia rotundato-lobata.

XVIII. *NOTHOLÆNA* R. Br: prodr: ed: 2. p. 1. = *Notochlæna* Spr: syst: n. 3240. = *Acrostichi*, *Pteridis*, *Ceterach*, et *Cincinalidis* spec: nonnullæ quorund:

» *Sori* marginales continui setis quandoque inter-  
» stinctis. »

*Obs*: Genus constans ex Spr: 13. stirpibus per orbem sparsis, inter quas 2. etiam europææ.

\* 1. *N. Marantæ* = R. Br: l. c. in obs: = Spr: syst: IV. 43. Sub *Acrosticho* L. sp: 1527. = Schk: crypt: IV. t. 4. aliiq. Sub *Ceterach* DC. fl: fr: n. 1434. Ic: taur: vol. 14. t. 34. f. 2. (Eur: med: et austr:, *Armenia*, *Teneriffa*. *Pedem*: inter *Lanzo* et *Viù* abunde, inter *Varallo* et *Allagna*, circa *Eporédiam*, *Plossascum*, secus *Duriam* in saxosis prope

*la Rocca di Villaregia*, inter *Superga* et *Baudissè*, non infrequens ad rupes montium subalpinorum locis apricis ALL: n. 2416. Vulgatissima ad rupes *Condo-viarum* et speciatim in regione dicta *la Grangietta* RE fl: segus: p. 84. In *M. Musiné* RE fl: tor: II. p. 178. Ad rupes collium et montium frequens BIROLI fl: acon: II. p. 147.). Perenn: Stipes rachidesque squamosæ, frons 2 - pinnata ovato - lanceolata multijuga, pinnæ sub-oppositæ sessiles oblongæ patentēs 4 - 5 - jugæ, foliola ovato-oblonga integerrima obtusa superiora coadunata superne lævia subtus squamosa.

2. *N. lanuginosa* = Spr: syst: IV. 43. ex Desv: Sub *Acrosticho* Desf: atl: II. p. 400. t. 256. *A. vel-leum* Ait:, W. (*Hispan:*, *Græcia*, *Madera*, *Afr:* bor: *Sardin:* ad rupes *Sarrabus*, *Capo-Terra*, *Sinay* MORIS st: sard: I. p. 54.). Vix differt a priori pinnis brevî-petiolatis sub-alternis, foliolis utrinque longissime al-bido-lanuginosis nec subtus squamosis. = 3. *N. Doradilla* = Colla pl: rar: chil: fasc: VII. ined: t. LXXIII. *N. ....?* Berter: in sched: (In rupestribus maritimis *Valparaiso* vulgo *Doradilla*). « *N. stipite fusco squa-*  
» *moso, rachide frondibusque undique floccoso-lanatis*  
» *2 - pinnatis ovato - lanceolatis multijugis, fertilibus*  
» *majoribus lana rufa, sterilibus minoribus lana sul-*  
» *phurea, pinnis in omnibus alternis lanceolato - li-*  
» *nearibus patentiusculis apice circinato-revolutis 7 -*  
» *9 - jugis, pinnulis linearibus patentissimis pinnati-*  
» *sectis segmentis ovato-rotundatis minimis, in soris*  
» *setis longis interstinctis.* » NOB:

XIX. POLYPODIUM Sw: syn: fil: 3. = Spr: syst: n. 3243.  
= Lam: ill: t. 866. excl: f. a.

» *Sori* sub-rotundi sparsi nudi. »

*Obs:* Inter *Filices* nullum Linnæanum genus majores subiit mutationes quam *Polypodium*, a quo primum diremptæ fuerunt species omnes *indusiatae*, hinc inter istas præsertim ex indusii structura plurima alia genera statuta fuerunt uti superius vidimus; attamen a W., qui jam Sw: divisiones secutus erat, 156. stirpes enumerabantur, nunc a Spr: ad 215. protractæ (omnes exoticæ, 3. tantum europææ), ex quo quisque percipit quæ sit difficultas in ipsarum recta determinatione, quamvis in varias sectiones subdivisæ fuerint ex fronde sterili a fertili *discrepante* vel utraque *conformi*, ex earum *simplicitate* vel diversa *compositione*, ex laciniarum foliolorumque *structura* et *superficie* etc. Cons: inter alios Poir: dict: V. p. 508. et suppl: IV. p. 484. Nonnullæ stirpes exoticæ occurrunt in calidariis europæis ornamenti vel curiositatis gratia.

\* 1. *P. vulgare* = L. sp: 1544. = Spr: syst: IV. 12. = Schk: crypt: p. 12. t. 11. Bull: hb: t. 191. Vern: *Argalizia servaja* (*Eur.*, *Asia* et *Amer.*: hor: *Pedem.*: ubique in sylvis montanis et collinis, atque sæpe ad radices arborum ALL: n. 2398. RE fl: segus: p. 84. et fl: tor: II. p. 179. BIROLI fl: acon: II. p. 149. *Sardin.*: in umbrosis montium MORIS st: sard: I. p. 54.). Perenn: Stipes squamosus ceterum glabrum, frondes profunde pinnatisectæ segmentis lanceolatis obtusis patentibus crenulatis superioribus gradatim minoribus, sori 2-seriales conspicui. Variat laciniis in-



ferioribus basi auriculatis (var:  $\beta$  *auritum* W. sp: V. 173.); laciniis evidenter serratis (var:  $\gamma$  *serratum* W. l. c.); laciniis sinuato-laceroque-pinnatifidis (*P. cambricum* L. sp: 1546., var:  $\epsilon$  *cambricum* W. l. c.), quæ var: occurrit in *Sardin*: ad rupes *Monte Santo Pula* monente MORIS l. c. et colitur in hortis curiositatis gratia.

\* 2. *P. Phegopteris* = L. sp: 1550. = Spr: syst: IV. 57. = Schk: crypt: 17. t. 20. Sub *Polysticho* Roth: germ: III. 72. (*Eur*: passim. *Pedem*: locis umbrosis montanis et subalpinis ALL: n. 2401. In montanis atque speciatim prope *la Piana di S. Nicola* RE fl: segus: p. 85. In sylvis *della Mandria* RE fl: tor: II. p. 179. In umbrosis collium vulgare BIROLI fl: acon: II. p. 150.). Perenn: Stipes rachidesque villosiusculæ, frondes pinnatæ, pinnæ sessiles oppositæ lineari-lanceolatæ patentès rhombo foliaceo fere junctæ inferiores disjunctæ deflexæ omnes pinnatifidæ, laciniæ oblongæ obtusæ integerrimæ ciliatæ, sori sub-marginales minimi.

\* 3. *P. Dryopteris* = L. sp: 1555. = Spr: syst: IV. 60. = Schk: crypt: p. 19. t. 25. Sub *Polysticho* Roth: germ: III. 80. (*Eur*., *Asia* bor: *Pedem*: frequens in sylvis saxosis umbrosis subalpinis, circa thermas *Valderii* atque in alpibus *Valdensibus*; etiam in agro *Taurin*: extra moenia urbis muris septentrioni expositis ALL: n. 2402. In locis umbrosis saxosis montanis atque sub-humidis RE fl: segus: p. 85. In sylvis *della Mandria* prope *la Fabbrica della polvere* et etiam prope *Supergam* RE fl: tor: II. p. 179. In magna valle *Sessitis* BIROLI fl: acon: II. p. 151.). Perenn: Glaber-

rimum, radix stipites et rachides filiformes, frondes ternatæ, rami pinnati, pinnæ sub-alternæ lanceolatæ patentès pinnatifidæ, laciniae oblongæ obtusæ inferiores versus apicem crenulatæ superiores sub-integerrimæ, sori 2-seriales venulas terminantes parvuli.

*Polypodia dubia vel nova.*

Plures species (30. circiter) rarissimas possideo communicatas a cll: MARTIO e *Brasil:* et BERTERO ex ins: *Caribæis* et *Chili*, inter quas pars major<sup>1</sup> satis bene determinatæ, seqq: autem valde dubiæ vel novæ. = 4. *P. alte scandens* = Colla pl: rar: chil: fasc: VII. ined: *P. tenellum* Forst: ? Videtur diversum an n. sp: ? Caudex alte scandens; ad arborum truncos in sylvis ins: *Juan-Fernandez*: ita in scheda specim: ex BERTER: « *P. stipite alte scandente nigricante squamoso,*  
» *rachide tereti glanduloso-pilosa, frondibus late lan-*  
» *ceolatis elongatis pinnatis multijugis, pinnis alter-*  
» *nis sub-sessilibus approximatis ovato-lanceolatis*  
» *glabris obtusis serratis, basi cuneato-truncata su-*  
» *perne in auriculam producta, soris globulosis ad*  
» *apicem venularum solitariis.* » Differt a *P. tenello* ex descr: Auctorum præsertim pinnis *sub-sessilibus* nec *petiolatis*, *approximatis* nec *remotis*, *ovato-non lineari-lanceolatis*, *obtusis* nec *acuminatis*, evidenter *serratis* nec *repando-crenatis*, caudice equidem scandente sed neutiquam radicante. = 5. *P. inæqualifolium* = Colla pl: rar: chil: fasc: ined: *P. an n. sp: ?* Berter: in sched: (In sylvis umbrosis collium ins: *Juan-Fernandez*). « *P. rachide angulosa pilosa sub-*

» squamosa, frondibus amplissimis 2 - pinnatis mul-  
 » tijugis, pinnis alternis remotis ovato - lanceolatis  
 » elongatis dexteris inferioribus duplo triplove sini-  
 » stris minoribus superioribus sub - æqualibus, pin-  
 » nulis sessilibus lineari-lanceolatis profunde pinnati-  
 » sectis, segmentis ovato-oblongis sub-falcatis subtus  
 » margineque ciliatis, soris globosis ad apicem ve-  
 » nularum solitariis demum sub-confluentibus. » NOB:  
 Stipes deest in specim: Pinnæ dexteræ a sinistris di-  
 versæ tribuunt ei habitum prorsus singularem. = 6.  
*P. confluens* = Colla l. c. non R. Br: *P....?* Berter:  
 in sched: (*Chili*). « *P. rachide lineari lævi glaber-*  
 » rima hinc superne canaliculata, frondibus lineari-  
 » lanceolatis pinnatis multijugis pinnis oppositis ere-  
 » ctiusculis oblongis remotis profunde pinnati-sectis,  
 » segmentis ovato-oblongis obtusis sub - tomentosis,  
 » soris confluentibus totam paginam inferiorem te-  
 » gentibus. » NOB: Deest stipes in specim: *P. con-*  
*fluens* R. Br: prodr: ed: 2. p. 2. nunc pertinet ad  
 genus *Niphoboli* KAULF.; planta nostra habitu quo-  
 que, sc: fronde *simplici* valde differt. = 7. *P. inter-*  
*medium* = Colla l. c. t. LXXIV. *P. californicum an*  
*diversum?* Berter: in sched: (Ins: *Juan-Fernandez*).  
 » *P. stipite squamuloso, rachide tereti glaberrima*  
 » superne sub - alata, frondibus late ovatis pinnatis  
 » 5 - 7 - jugis, pinnis oppositis lanceolatis crenulatis  
 » acutis inferioribus remotiusculis infimis sæpe basi  
 » exteriori auriculatis summis confluentibus, soris sub-  
 » globosis solitariis inter venularum ramos anastomo-  
 » santibus. » NOB: Medium tenet inter *P. californicum*  
 KAULF: et *alatum* L.; ad primum magis accedit so-



rorum dispositione, sed differt fronde potius *pinnata* quam *pinnatifida*, pinnis *acutis* nec *obtusis*, *crenatis* nec *argute serratis*; ad alterum rachide *sub - alata*, sed ita in pinnis *superioribus* tantum non ad *basim stipitis usque*, differt insuper ala *non sorophora*. Planta sec: BERTERUM parasitica arcte truncis arborum adhærens. = 8. *P. californico proximum* = Berter: in sched: (Ad arborum truncos in sylvis densis collium loco dicto *las Tablas* prope *Valparaiso*). Differt a priori, cum quo habitu quadrat, soris *oblongis* venulis valde tenuioribus nec tam evidenter anastomosantibus. = 9. *P. n. sp.*: Ita in sched: specim: communicati a cl: MARTIO (*Brasil:* in truncis arborum vetustorum). Pertinet ad primam sectionem sc: *fronde simplici indivisa*; sed unicam frondem possideo apice mancā, unde nil certi asserere possum; frons hæc glaberrima late lanceolata basi attenuata margine subundulata, venis primariis transversalibus parallele alternis, secundariis rectis parallellis ab una ad alteram venam primariam sub-divisis in 2. tenuissimas venu-las apice 1-soriferas, sori globosi minimi. = 10. *P. Martii* = Nob: *P.... sp: n.?* Mart: in sched: (*Brasil:*). » *P. stipite rachideque sub - squamosis*, fronde pro- » funde pinnati - secta, segmentis 5 - 7. sub-alternis » lineari-lanceolatis obtusiusculis repandis basi 3-an- » gulari-confluentibus utrinque tenuissime pilosiuscu- » lis, venis inconspicuis, soris globosis solitariis mar- » gine sinuum approximalis. » Nob: Videtur accedere ad *P. latipede* FISCH: sed fronde *pilosiuscula* nec gla-bra, soris *margini* nec *costæ* approximalis, 1- non 2-serialibus præsertim distinctum.



## ORDO CXCIV.

## O S M U N D A C E Æ

(Reich: consp: I. p. 39. = Bartl: ord: nat: p. 18.  
 = *Gleichenæ* et *Osmundaceæ* R. Br: prodr: ed: 1.  
 p. 160. 161. et ed: 2. p. 16. 17. = *Poropterides* et  
*Schismatopterides* W. sp: V. p. XXXXI. XXXXII.  
 = *Poropterides*, *Osmundæ* et *Gleichenæ* Spr:  
 syst: IV. p. 4.).

*Char: essentialis.*

» *Capsulæ* in pagina inferiori frondium, sæpius  
 » horum segmentis contractis vel omnino immutatis,  
 » in spicas simplices vel paniculatas congestæ, seria-  
 » tim connatæ *annulo* sive *zona* striata rarius obli-  
 » qua vel rarissime (in *Panicularia*) soro nudo cin-  
 » ctæ (*Gleichenæ* R. Br:), vel *liberæ* sive *exannu-*  
 » *latæ* vertice radiatim striato (*Osmundaceæ* R. Br:),  
 » rima longitudinali rarissime poro (*Poropterides* W.),  
 » vel apice 2 - valvi (in *Panicularia*) dehiscentes,  
 » ut plurimum sessiles, indusiatae vel nudæ. »

*Obs:* Ordo artificialis, constans ex BARTL: 12. generibus, quorum varia obscura. Plantæ fere omnes exoticæ.

I. OSMUNDA Lin: gen: ed: Schreb: n. 1622. excl: variis stirpib: = Spr: syst: n. 3224. = Lam: ill: t. 865. excl: fig: 1.

» *Capsulæ* sub-globosæ pedicellatæ a basi ad gibber



» dorsale striatum pellucidum deliscentes, in fronde  
 » prorsus contracta paniculatim dispositæ, vel ad  
 » marginem frondis foliosæ in parte superiori immu-  
 » tatæ. *Indusium* o. »

*Obs:* Genus habitu satis naturali nunc ad paucas stirpes (8. ex SPR:) circumscriptum, variis ad alia genera, *Anemiam* præsertim, amandatis. Plantæ exoticæ, 1. tantum europæa, frondibus 2-pinnatis vel 2-pinnatifidis, quandoque fructificantibus a sterilibus diversis, alias fructificatione in uniuscujusque frondis parte superiore.

\* 1. *O. regalis* = L. sp: 1521. = Spr: syst: IV. 24. = Fl: dan: t. 217. Lam: ill: t. 865. f. 2. Vern: *Osmunda* (Eur: passim. *Pedem:* locis umbrosis humidis prope *Giaveno*, et *Ivrea* eundo ad pagum *Bross*, prope *Eporediam* circa lacum *di S. Michele* et supra *la Vigna rossa* loco dicto *la Rovina* ALL: n. 2388. RE fl: segus: p. 84. Ad fossas aquosas frequens præsertim secus viam *della Biandrina* BIROLI fl: acon: II. p. 146. In *Ligur:* frequens secus *Leira a Voltri* BERTOL: am: ital: p. 212. *Sardin:* frequens ad rivulos in montibus MORIS st: sard: I. p. 54.). Perenn: Elata ferrugineo - tomentosa, frondes amplæ 2 - pinnatæ, pinnæ inferiores sub - oppositæ erectiusculæ ovato - lanceolatæ multijugæ, foliola sessilia lanceolata basi dilatata inferius sub - auriculata, pinnæ superiores in tot paniculas immutatæ ramulos margine confluenti - capsuliferos loco folioli gerentes. Planta officinalis.

II. ANEMIA Sw: syn: fil: 6. = Spr: syst: n. 3232. =  
*Osmundæ* spec: plures Auctor:

» *Capsulæ* sub-turbinatæ sessiles vertice radiatim  
 » striatæ longitudinaliter dehiscentes in spicas com-  
 » positas 1-laterales. *Indusium* o. »

*Obs:* Figura capsularum et dispositio fructificatio-  
 nis distinguunt præsertim hoc genus eique habitum  
 fere proprium tribuunt. Constat autem ex SPR: 27.  
 stirpibus omnibus ex *Ind:* occid:, inter quas seqq: a  
 cl: MARTIO communicatæ mihi dubiæ sunt.

1. *A. incisa* = Mart: in sched: (*Brasil:*). « *A. sti-*  
 » pite rachideque erectis teretibus squamosis, fronde  
 » pinnata, foliolis sessilibus lineari-lanceolatis acutis  
 » glabris patentibus basi sub-obliquis, inferioribus  
 » oppositis inæqualiter incisis lobis obtusis superiori-  
 » bus sub-alternis sub-integerrimis, spicis simplicibus  
 » geminis strictis striatis villosiusculis. » NOB: Spicæ  
 ex axillis foliolorum inferiorum longissimæ reliquam  
 partem frondis sub-æquantes. = 2. *A. gracilis* =  
 Mart: in sched: (*Brasil:*). « *A. stipite* rachideque gra-  
 » cilibus decumbentibus piloso-squamosis, fronde pin-  
 » nata, foliolis sessilibus alternis ovato-oblongis ob-  
 » tusis sub-repandis scabriusculis, spicis simplicibus  
 » geminis capillaribus glabris. » NOB: Planta digitalis  
 prostrata demum adscendens; spicæ ex axillis folio-  
 lorum mediorum gracillimæ reliqua parte frondis du-  
 plo longiores. = 3. *A. anthriscifolia* = Mart: in sched:  
 (*Brasil:*). « *A. stipite* rachideque erectis superne ca-  
 » naliculatis piloso-squamosis, fronde pinnata, pinnis  
 » alternis elongatis profunde pinnati-sectis, segmentis

» ovato-lanceolatis obtusiusculis decurrentibus sub -  
 » integerrimis glabris. » NOB: Spicæ desunt in specim:  
 = 4. *A. absissa* = Mart: in sched: (*Brasil:*). « *A.*  
 » stipite rachideque erectis teretiusculis dense piloso-  
 » squamosis, fronde pinnata, foliolis sessilibus op-  
 » positis lanceolatis acutis basi superne dilatato-trun-  
 » catis villosiusculis, inferioribus incisis superioribus  
 » denticulatis, spicis geminis striatis squamulosis su-  
 » perne racemosis. » NOB: Planta pedalis et ultra,  
 spicæ seu pedunculi ex axillis foliolorum inferiorum  
 reliqua parte frondis breviores apice nutantes ibique  
 4-5. racemulis fructificantibus instructi. = 5. *A. ro-*  
*tundifolia* = Mart: in sched: (*Brasil:*). « *A. rhizo-*  
 » mate tuberculis planiusculis ad extremitatem fibra-  
 » rum instructo, frondibus gracillimis inferne longo  
 » tractu nudis rachide filiformi glabra, superne pin-  
 » natis, foliolis sub-sessilibus alternis rotundatis cre-  
 » nulatis, pedunculo frondem terminante elongato  
 » apice fructificante racemuloso, racemulis pilis lon-  
 » gis intermixtis. » NOB: Plantula palmaris debilis,  
 ab omnibus congeneribus habitu ac inflorescentia re-  
 cedens, ac forsitan novum genus constituens; racemus  
 ad apicem pedunculorum frondes terminantium vix  
 1-lin: longus 1/2 latus pilis creberrimis capsulas cir-  
 cumeuntibus obsitus; ob capsularum tenuitatem in  
 planta sicca racemum unicum exhibente, illarum stru-  
 cturam rite secernere frustra tentavi.

### III. PANICULARIA Colla pl: rar: chil: fasc: VII. t. LXIV.

» *Panicula* frondiformis. *Sori* solitarii pedicel-  
 » lati globosi vertice æqualiter dehiscentes. *Indusium*



» nullum. *Capsulæ* longi-stipellatæ globulosæ angulatæ  
 » sub-exsertæ apice 2-valvi dehiscences. »

*Obs:* Genus a COLLA creatum ex planta missa a BERTERO sub nomine dubio *Cyatheæ* vel *Ancimiæ*, ab eis non solum characteribus allatis, verum etiam habitu proprio satis distinctum. Frons fertilis in veram paniculam omnino immutata racemum *Vitis viniferæ* post hujus anthesim simulantem sed planam, ceterum figura magnitudine et compositione frondi sterili fere conformis, modo constans sola stirpe sequenti.

1. *P. Berteri*. « Stipite arboreo erecto glabriusculo,  
 » frondibus alternis 3-pinnatis glabris multijugis, ra-  
 » chide communi partialibusque squamulosis, pinnis  
 » conformibus, pinnulis sub-sessilibus lanceolatis  
 » pinnati-sectis dentatisve, segmentis dentibusque  
 » obtusiusculis apice albido-callosis. » *NOB:* (In sylvis  
 umbrosis humidisque montium editiorum ins: *Juan-Fernandez* *BERTER:*).

*Obs:* geographica circa *Osmundaceas*.

<i>Osmundaceæ</i> per orbem sparsæ circiter	.	.	.	120
<i>Osmundaceæ</i> pedemontanæ	.	.	.	1

## ORDO CXCIV.

## OPHIOGLOSSÆ

(R. Br: prodr: ed: 1. p. 163. ed: 2. p. 19. =  
 Spr: syst: IV. p. 4. = Bartl: ord: nat: p. 19. =  
*Hachyopteridearum* pars W. sp: V. p. XXXXV.).

*Char: essentialis.*

» *Capsulæ* uniloculares basi adnatæ sub - globosæ  
 » coriaceæ axannulatæ, interdum connatæ, semi-2-  
 » valves ab apice dehiscentes. »

*Obs:* Parvus ordo naturalissimus, constans 3. generibus satis apte determinatis, herbaceis perennantibus, frondibus integris vel varie sectis, inferioribus sterilibus superioribus in fructus abeuntibus sc: frondium lamina ipsa in capsulas prorsus mutata.

I. OPHIOGLOSSUM Lin: gen: ed: Schreb: n. 1621. excl: paucis stirpib: = Spr: syst: n. 3218. = Lam: ill: t. 864.

» *Capsulæ* in spicam articulatam disticham connatæ  
 » transverse dehiscentes. »

*Obs:* Genus constans ex SPR: 12. stirpibus, inter quas 2. tantum europææ; plantulæ fronde foliacea solitaria plus minus late lanceolata varie reticulata, fructifera caulina varie inserta, vel radicali (1).

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(1) Frons fructifera dicitur *caulina* quando a latere plantæ extra terram exsurgit pedunculi ad instar apice spicam gerens, sed reapse pedunculus hic est verus frondis petiolus spica autem lamina contracta; *radicalis* vel *scapigera* appellatur quum directe e radice exsurgit.

\* 1. *O. vulgatum* = L. sp: 1518. = Spr: syst: IV. 22. = Fl: dan: t. 147. Vern: *Erba senza costa*, *Serpentina* (Eur: passim, Amer: bor: *Pedem:* in pratis et pascuis sub - humidis collium, abunde in pratis *Vercellensibus* ALL: n. 2386. In sylva vineæ d' *Aigue-blanche*, in pratis humidis ex adversa parte collium sub via di *Revigliasco*, et in locis humectis et umbris ad semitam prope *Supergam* in ascensu qui ducit ad cauponam RE fl: tor: II. p. 177. In pratis collium frequens, in illis prope *Novariam* a *S. Andrea* raro occurrit BIROLI fl: acon: II. p. 146.). Perenn: Glabrum, frons ovato-oblonga integerrima arcte reticulata, spica caulina pollicaris longe pedunculata.

2. *O. lusitanicum* = L. sp: 1518. (*Lusitania*, Ital: merid: *Sardin:* in pascuis maritimis MORIS st: sard: I. p. 54.). Differt a priori statura valde *minori*, fronde *lanceolata* non reticulata, spica interdum radicali.

*Species dubia fortassis nova.*

3. *O. stipatum* = Miers? Ita in sched: specim: ex BERTERO (In pascuis declivibus humidis *Valparaiso*). Plantula *O. vulgato* duplo minor, fronde ovata in petiolum attenuata laxe reticulata, spica caulina 2 - lin: longa longissime pedunculata radice stipata, ex qua forsau nomen specificum.

II. BOTRYCHIUM Sw: syn: fil: 8. = Spr: syst: n. 3220. = *Osmundæ* et *Botrypi* spec: nonnullæ quorund:

» *Capsulæ* globosæ distinctæ rachidi racemi compositi adnatæ. »





## Sect: III.

*Lycopodineæ* Sw: syn: fil: p. 173. = R. Br: prodr:

ed: 1. p. 164. ed: 2. p. 20. =

Classis propria Bartl: ord: nat: p. 19. =

*Stachyopteridearum* gen: quædam W. sp: V. p. XXXXI.

= *Lycopodeæ* Spr: syst: IV. p. 4. =

*Musci* sect: III. Juss: gen: p. 12.

*Char: essentialis.*

» *Capsulæ* sub-sessiles nudæ liberæ axillares soli-  
 » tariæ nunc per caulem ramosve sparsæ, nunc in  
 » spicas simplices vel ramosas sessiles vel peduncu-  
 » latas confertæ, 1-loculares vel rarissime 2-3-locu-  
 » lares 2-3-valves pulvere farinaceo repletæ (an vera  
 » semina?) quandoque biformes sc: aliæ 2-valves pul-  
 » verem farinaceum (an organa mascula?) aliæ 3-  
 » valves corpuscula globosa (an flores fœminei?) in-  
 » cludentes. »

*Obs:* Sectio valde naturalis *Muscis* habitu ac folio-  
 rum situ et figura, *Ophioglosseis* capsularum structura  
 quodammodo affinis, unicum ordinem constituens,  
 exhibens plantas terrestres vel parasiticas, plurimas  
 ex regionibus calidioribus, herbaceas vel suffruticosas,  
 caulibus alterne dichotomis ramosis raro simplicibus  
 teretibus vel quandoque compressis angulatisve, foliis  
 sessilibus imbricatis simplicibus integris.

## ORDO CXCVI.

## L Y C O P O D I A C E Æ

(Bartl: l. c.).

*Char: essentialis.*

Idem ac sectionis (Genera 3.).

I. LYCOPodium Lin: gen: ed: Schreb: n. 1615. excl: 1.  
 stirpe = Spr: syst: n. 3217. = Lam: ill: t. 872.

» *Capsulæ* vel uniformes 1-loculares 2-valves gra-  
 » nulis hispidulis plenæ, vel biformes 2 - 4 - valves  
 » corpusculis majoribus paucis. »

*Obs:* Genus numerosissimas continens stirpes (140.  
 ex SPR:) per orbem sparsas fere omnes exoticas, 9 -  
 10. tantum europæas, ab Auctoribus in varias sectio-  
 nes divisas, sc: spicis dichotomis (*Plegmaricæ* W.),  
 vel pedunculatis (*Lycopodia* W.), aut sessilibus, foliis  
 caulem circum obsidentibus (*Lycopodiastra* W.), vel  
 sessilibus, foliis distichis (*Lycopodioidea* W.), vel  
 capsulis axillaribus (*Selagines* W.).

\* 1. *L. clavatum* = L. sp: 1564. = Spr: syst: IV.  
 13. = Fl: dan: t. 126. Inter *Lycopodia* W. Vern:  
*Braje d'ours* (Eur., Asia et Amer: bor: *Pedem:* pas-  
 sim in sylvis collinis et montanis ALL: n. 2421. In  
 montanis *di Giaveno* RE fl: segus: p. 85. In ericetis  
 collium *Taurinens:* RE fl: tor: II. p. 177. In pascuis  
 VOL. VI.



montanis vulgare, nec deest in ericetis *Ticini* BIROLI fl: acon: II. p. 152.). Perenn: Glaberrimum repens ramosissimum ramis adscendentibus, folia sparsa subimbricata linearia enervia apice longe setigera, fructificatio clavata sc: spicæ terminales pedunculatæ geminæ cylindricæ squamosæ, squamis ovatis setigeris capsula longioribus.

\* 2. *L. complanatum* = L. sp: 1567. = Spr: syst: IV. 14. = Fl: dan: t. 78. Inter *Lycopodia* W. (*Eur: Asia* et *Amer: bor: Pedem:* in sylvis apricis non infrequens, abunde in valle *Ursina*, jugis *l'Argentera* supra *Rodoret*, et in valle *Pragellas* ALL: n. 2426. In montibus *di Giaveno* RE fl: segus: p. 85. In sylvis valis *di Vegezzo* ad alpen *di Ralce* unice vidit BIROLI fl: acon: II. p. 153.). Perenn: Erectum glabrum alternatim dichotomo-ramosum, folia bifaria connata adpressa sub-acuminata, pedunculi sub-4-fidi sub-4-stachyi, spicæ ut in præcedenti sed generatim breviores squamis acuminatis reflexis.

\* 3. *L. alpinum* = L. sp: 1567. = Spr: syst: IV. 14. = Fl: dan: t. 79. Inter *Lycopodiastra* W. (*Alpib: Eur: med: et bor:, Asia bor: Pedem:* in *M. Cenisio* non infrequens, atque in *Subaud:* loco dicto *Entre les deux eaux*, in sterilibus elatioribus *di Viù* loco dicto *Pianfino* ALL: n. 2425. In pascuis *M. Cenisii* RE fl: segus: p. 85. In summis pascuis *di Craveggia* et montis *Cistella* BIROLI fl: acon: II. p. 153.). Perenn: Erectiusculum dichotomo-fasciculatum, folia quadrifariam imbricata ovato-lanceolata convexiuscula acuta adpressa, spicæ terminales sessiles solitariae te-

retiusculæ breves, squamæ ovatæ acuminatæ extus sub-muricatæ.

\* 4. *L. annotinum* = L. sp: 1566. = Spr: syst: IV. 15. = Fl: dan: t. 336. Inter *Lycopodiastra* W. (*Eur.*, *Asia*, *Amer.*: bor: *Pedem.*: in sylvis subalpinis umbrosis ALL: n. 2424. In pascuis *M. Cenisii* RE fl: segus: p. 85. In ericetis montanis *d'Intra* et *Cannobbio* BIROLI fl: acon: II. p. 153.). Perenn: Repens ramis adscendentibus basi sæpius bis bipartitis ramulis simplicibus, folia quinquesaria linearia mucronata patentia, spicæ ut in priori, sed longiores squamis extus lævibus.

\* 5. *L. inundatum* = L. sp: 1565. = Spr: syst: IV. 15. = Fl: dan: t. 336. Inter *Lycopodiastra* W. (*Eur.*, *Amer.*: bor: *Pedem.*: in sylvis *S. Petri di Mozzo* unice invenisse tradit BIROLI fl: acon: II. p. 153.). Differt a priori ramis *erectis simplicibus*, foliis *sparsis* angustioribus *sub-incurvis*.

\* 6. *L. selaginoides* = L. sp: 1565. = Spr: syst: IV. 16. = Fl: dan: t. 70. Inter *Lycopodiastra* W. (*Eur.*, *Amer.*: bor: *Pedem.*: frequens locis spongiosis Alpium ALL: n. 2422. RE fl: segus: p. 85. In pascuis alpinis vulgare BIROLI fl: acon: II. p. 153.). Perenn: Humile repens ramosissimum ramis simplicibus adscendentibus, folia sparsa valde approximata lanceolata patentiuscula, spicæ magis elongatæ quam in priori, sed graciliores squamis longioribus.

\* 7. *L. helveticum* = L. sp: 1568. = Spr: syst: IV. 16. = Jacq: austr: t. 196. Inter *Lycopodioidea* W. (*Helvet.*, *German.*: austr:, *Gallia*, *Ital.*: super: *Pedem.*:

nihil frequentius in pascuis sub-humidis Alpium atque etiam ad montes et colles descendit ALL: n. 2427. RE fl: segus: p. 85. Prope *Sturam* et ad aquarum ripas prope *Venariam* eundo versus *i bosch d' Colomin* RE fl: tor: II. p. 177. Ad radices arborum in collibus et montibus vulgare BIROLI fl: acon: II. p. 154.). Perenn: Repens radicans dichotomum, folia bifaria minuta semi-cordata obtusiuscula, superficialibus (*stipulæ* SPR:) alternis distichis ovato-oblongis obtusis, spicæ terminales sub-geminæ sub-pedunculatæ, capsulæ dimorphæ. Huc pertinet *L. radicans* SCHRANK:, *L. radicans* var:  $\alpha$  HOFFM:, *L. denticulatum* var:  $\beta$  LAM:

\* 8. *L. denticulatum* = L. sp: 1569. = Spr: syst: IV. 17. = Dill: musc: 462. t. 66. f. 1. A. (*Eur: austr: In locis inundatis prope Nicæam* RE reliq: Bellard: p. 6. *Sardin: frequens in sylvis MORIS st: sard: I. p. 53.*). Priori nimis affine, differt enim tantum foliis *denticulatis* superficialibusque *acutis*, spicis prorsus *sessilibus*.

\* 9. *L. Selago* = L. sp: 1565. = Spr: syst: IV. 21. = Fl: dan: t. 104. Inter *Selagines* W. (*Eur:, Amer: bor: Pedem: vulgare locis montanis et alpinis humidis et sylvosis* ALL: n. 2423. Locis umbrosis alpestribusque RE fl: segus: p. 85. In sylvis montanis frequens BIROLI fl: acon: II. p. 153.). Perenn: Erectum dichotomum ramis fastigiatis, folia 8-fariam imbricata linearia acuminata patentissima, capsulæ axillares sparsæ.



*Lycopodiaceæ spuria.*

II. NOTARISIA Colla pl: rar: chil: fasc: VII. ined: t. LXXV.

» *Capsulæ* sparsæ uniformes stipitatæ globosæ nudæ  
 » solitariae 1-loculares apice dehiscentes pulvere farinaceo repletæ. »

*Obs:* Genus a COLLA statutum et cl: D. DENOTARIS dictum pro una stirpe missa a BERTER: cum sola indicatione « *Genus fortasse novum Lycopodeum* », facie ad *Bryaceas* accedens, fructificationis situ quamdam habens affinitatem cum *Polypodiaceis*, majorem analogiam exhibens cum *Lycopodinis*, sed differens notis allatis et præsertim capsulis stipitatis nec sessilibus, sæpius frondi insidentibus, numquam in spicas confertis, constanter 1-ocularibus.

1. *N. lycopodioides* = Colla l. c. (Ad saxa locis nudis secus rivulos in montibus ins: *Juan-Fernandez*).  
 » *N.* stipite cæspitoso, cauliculis linearibus sub-erectis compressiusculis simpliciusculis glaberrimis,  
 » foliis sessilibus sub-sparsis lanceolato-ovatis acutis  
 » sub-integerrimis aveniis superioribus sub-fasciculatis, capsulis versus apicem cauliculorum foliis sub-  
 » tus axillisve vel cauliculis insidentibus. »

*Obs:* geographica circa *Lycopodiaceas*.

<i>Lycopodiaceæ</i> per orbem sparsæ circiter . . .	145
<i>Lycopodiaceæ</i> pedemontanæ . . . . .	8

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## Sect: IV.

*Gonyopterides*, classis propria Bartl: ord: nat:  
p. 20. = W. sp: IV. p. XXXXV. pro *Equiseto* =  
*Filices* et *Algæ* Spr: syst: p. 4. et 345.

*Char: essentialis.*

» *Fructificatio* varia, in inferioribus dimorpha (vid:  
» infra *Characeas*), in superioribus *capsulæ* sub squa-  
» mis peltatis in spicam terminalem dispositis dehi-  
» scentes semina numerosa filis quatuor spiralibus  
» involuta includentes. »

*Obs:* Sectio duos ordines comprehendens facie qui-  
dem parum dissimiles sed fructificatione diversa, ex-  
hibens plantas herbaceas annuas vel rhizomate sub-  
lignoso perennantes aphyllas, caulibus articulatis te-  
retibus sulcatis vel angulatis raro lævibus simplicibus  
vel ramosis, ramis plerumque verticillatis, vaginis ad  
caulis nodos variis rarius nullis.

## ORDO CXCVII.

## C H A R A C E Æ

(Ach: Rich: elem: bot: p. 413. = Agardh: syst: algar: p. XXVII. = Reich: consp: I. p. 77. = *Characeæ* inter *Algas* Spr: syst: IV. p. 312. = *Najadum* genus Juss: gen: p. 18. et DC. fl: fr: II. p. 384. = *Hydrocharideis affines* R. Br: prodr: ed: 1. p. 346. ed: 2. p. 202.).

*Char: essentialis.*

» *Organa* fructificationis sessilia ad ortum ramorum vel ramulorum; alia (*sporangia*, *flores* *foeminei* quorund:, *nucula* SPR:) granula minuta numerosissima conglutinata includentia e lamina duplici, exteriori membranacea tenui diaphana apicē dentibus coronata vel nuda, interiori firma spiraliter striata; alia globuli (*flores masculi* quorund:, *gemmae* SPR:) e membrana 3 - 4 - loba striis coccineis picta filis articulatis tenuissimis repleta. »

*Obs:* Ordo constans unico genere seq:

I. CHARA Lin: syst: ed: Murr: n. 1203. p. 689. = Spr: syst: n. 3413. = Lam: ill: t. 742.

» *Charact: ordinis.* » Apud SPR: est: « *Frons* tubulosa articulata spiratim striata. *Nucula* spiratim striata coronata 1-sperma moleculis globulosis farcta, *gemmae* rubrae globosae filis tenuissimis et tubulis



» radiatis plenæ. » Apud R. BR: est: « *Flores* dielines  
 » monoici vel dioici nudi. MASC: *Anthera* globosa ses-  
 » silis. FOEM: *Stigm*: 5.? sessilia. *Bacca* 1 - locularis  
 » polysperma. »

*Obs*: Genus fructificatione adhuc obscura, etsi a summis Botanicis diligentissime illustratum, satis cognitum tamen vegetationis organis ex microscopicis observationibus cl: AMICI. Plantæ annuæ aquaticæ submersæ tracheis et epidermide destitutæ, caulibus spiraliter striatis fragillimis verticillato-ramosis, aliæ omnino diaphanæ sæpius dioicæ (*Nitella* AGARDH: l. c.), aliæ opocæ crusta plus minus hispida obsitæ (*Chara* AGARDH: l. c.). Species ex SPR: 16. per orbem sparsæ, quarum media circiter pars europæa.

#### A. *Charæ* Agardh:

\* 1. *Ch: vulgaris* = L. sp: 1624. = Spr: syst: IV. 345. = Lam: ill: t. 742. f. 1. (In aquis stagnantibus fere totius *Eur*: *Pedem*: ubique in aquis sive stagnantibus sive lente fluentibus ALL: n. 2104. Ubique in locis aquosis RE fl: segus: p. 76. et fl: tor: II. p. 107. Aquis lente fluentibus ubique BIROLI fl: acon: II. p. 103. *Sardin*: in stagnis MORIS st: sard: I. p. 53.). Scabra ramosissima inermis basi nuda, verticilli ex 6-7. ramis subulatis, fructus sub-quaterni. Huc pertinent sec: MÉRAT nouv: fl: de Paris ed: 3. tom. I. p. 378. *Ch: funicularis* THUILL:, *delicatula* et *Hedwigii* AGARDH:, *fragilis* DESV:, *scoparia*, *radicans* et *setacea* CHAV:

\* 2. *Ch: tomentosa* = L. sp: 1624. non W. =

Spr: syst: IV. 345. = Moris: hist: s. 15. t. 4. f. 9. (In lacubus *Eur: Pedem: secus il Po morto*, in aquis lente fluentibus *di Borgomasino* et agri *Vercellensis* ALL: n. 2102. Supra *Moutiers* parvulos lacus inhabitat ALL: auct: p. 37.). Spongiosa tomentosa ad nodos aculeato - hispida basi sub - foliosa, rami ut in priori sed obtusi, fructus sub-solitarii. Huc referenda secus MÉRAT l. c. *Ch: decipiens* DESV: et sec: SPR: *Ch: latifolia* W. et *ceratophylla* HORNM:

\* 3. *Ch: hispida* = L. sp: 1624. = Spr: syst: IV. 345. = Lam: ill: t. 376. f. 3. (*Eur: lacubus. Pedem: in fossis circa Settimo Torinese* ALL: n. 2103. In aquis lente fluentibus *Tarantasiæ* frequens ALL: auct: p. 37. *Sardin: in aquis stagnantibus* MORIS st: sard: II. p. 12.). Vix differt a priori statura generatim *majori*, ramis *brevioribus undique* et *crebrius aculeato-hispidis*. *Ch: tomentosa* W. et *Ch: fallax, firma et collabens* AGARDH: pertinent ad hanc stirpem sec: SPR: l. c.

#### B. *Nitellæ* Agardh:

\* 4. *Ch: flexilis* = L. sp: 1624. = Spr: syst: IV. 346. = Lam: ill: t. 742. f. 2. (In aquis *Eur: et Asiæ. Pedem: incolit aquas puras in Exilliarum valle* ALL: auct: n. 2102. RE fl: segus: p. 76. *Sardin: in aquis stagnantibus Sardara, Domus-novas* MORIS st: sard: I. p. 53.). Glaberrima sub-pellucida valde flexilis ramis elongatis sub-verticillatis obtusiusculis, fructus sub-octoni bracteis longiores. Huc pertinent sec: SPR: *Ch: corallina* W., *nidifica* MULL:, *translucens* Engl: bot:, *obtusa* DESV:, *furcata* ROXB: et *opaca* AGARDH:

\* 5. *Ch: gracilis* = Spr: syst: IV. 345. ex Sm: = Sub *Nitella* Agardh: syst: algar: 125. = Fl: dan: t. 761. (In stagnis Eur: et Asie. Pedem: locis similibus BALB: el: p. 4. sub *Ch: syncarpa*. In paludosis prope *Venariam* RE app: II. p. 205. sub *Ch: fragili*. *Sardin:* in aquis stagnantibus lenteque fluentibus MORIS st: sard: II. p. 12. sub *Ch: pulchella*). Gracillima pellucida ramis sub-capillaribus approximatis sæpe 2-furcatis acutis, fructus sub-solitarii bracteis breviores vel ebracteati. Stirps polymorpha præsertim pro ramorum dispositione et fructuum numero, unde plures species ab Auctoribus perperam ex ipsa statuta, veluti *Ch: capillacea* THUILL:, *delicatula*, *tenuissima* et *fragilis* DESV:, *fibrosa* et *pilifera* AGARDH:, *pulchella* WABR:, *intricata* ROTH:, *batrachosperma* et *syncarpa* THUILL:, *capitata* NEES, *hyalina* DC. Planta BALBISII sc: *Ch: syncarpa* DC. fructus refert *sub-ternos ebracteatos*.

Obs: geographica circa *Characeas*.

*Characeæ* per orbem sparsæ ex SPR: . . . 16

*Characeæ* pedemontanæ . . . . . 5

Et sic tertiam circiter partem constituunt.

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## ORDO CXCVIII.

## EQUISETACEÆ

(DC. fl: fr: ed: 3. II. p. 580. = Vaucher monogr: des Prêles, Paris, Genève 1822. = Bartl: ord: nat: p. 21. = *Equisetæ* Spr: syst: IV. p. 4.).

*Char: essentialis.*

» *Spica* terminalis conica ex squamis (*receptacula*)  
 » verticillatis stipitatis peltatis sub-rotundo-polygonis.  
 » *Corpuscula* capsulæformia (*sporangia* BARTL:; *indusium* corniculatum W.) subtus receptaculis adnata  
 » in orbem disposita membranacea introrsum longitudinaliter dehiscentia. In singulo sporangio plures  
 » globuli (*sporæ*, *semina acotyledonea* VAUCH: BARTL: SPR:; *stam:* W.) laminis quatuor (*fili*, *organa masculina* VAUCH:) elongatis elasticis hygrometricis apice clavatis pulvere pollinaceo conspersis arcte  
 » involuti. »

*Obs:* Ordo præ ceteris tum habitu cum fructificatione propria naturalissimus, constans unico genere (*Equisetum*) et ex VAUCH: et SPR: 18. stirpibus, quarum magna pars europææ. Plantæ terrestres vel palustres vero caudice seu collo destitutæ, rhizomate repente cauliforme sub-terraneo perenni instructæ, caulibus (*frondes* quorund:) teretibus sulcatis vel angulatis glabris vel plus minus scabris cortice varie glanduloso (*glandulæ corticatæ* MIRB:), articulatis ad

nodos vaginatis ibique sæpius verticillatim ramosis, ramis simplicibus vel rarius sub-divisis, vaginis clausis membranaceis truncatis vel varie dentatis; caules hi nunc uniformes, nunc (rarius) diffformes, sc: alii fructiferi (scapi) nudi, alii steriles ramosi; ex quibus omnibus optimi desumuntur characteres. Cons: speciatim laudatum celeberrimi VAUCHERII opus, in quo (p. 33.) extat tabula synoptica pro stirpium divisione; repetita hujusce Auctoris experimenta suadent, *sporas* in hoc genere esse vera semina acotyledonea a pulvere pollinaceo, quo *fili* conspersi sunt, fœcundata; hinc a nonnullis Botanicis inter plantas phanerogamas enumeratur (*Monoëc: tetrand:*).

I. EQUISETUM Lin: gen: ed: Schreb: n. 1614. = Spr: syst: n. 3215. = Lam: ill: t. 862.

» Charact: ordinis. »

### 1. *Caulibus diffformibus.*

\* 1. *E. arvense* = L. sp: 1516. = Spr: syst: IV. 11. = Vauch: monogr: p. 33. t. 1. Vern: *Rasparela*, *Coda cavalina* uti ceteræ species indigenæ (*Eur: Asia, Amer:* bor: *Pedem:* ubique in arvis et ad vias locis sub-humidis ALL: n. 2381. RE fl: segus: p. 83. In arvis humidis speciatim in illis *di S. Rochetto* et prope *la Mandria* RE fl: tor: II. p. 175. In arvis humidis et pratis uliginosis frequens BIROLI fl: acon: II. p. 145.). Caulis sterilis sub-erectus scabriusculus 12-sulcatus dentibus totidem ramis perfecte verticillatis simplicibus tetragonis, scapus evanidus vaginis laxis cylindricis 12-dentatis dentibus acutis longioribus quam

in caule sterili. Variat vaginis magis *approximatis*, ramis *trigonis* (*E. triquetrum* BORY DE S. VINCENT); caulibus sterilibus erectis et depressis.

\* 2. *E. fluviatile* = L. sp: 1517. = Spr: syst: IV. 11. = Vauch: monogr: p. 35. t. 2. (*Eur.*, *Sibir.*, *Afr.*: bor: *Pedem.*: secus fluvios et torrentes ALL: n. 2383. In uliginosis secus rivulos RE fl: segus: p. 83. In paludosis non infrequens RE fl: tor: II. p. 175. In uliginosis vulgare BIROLI fl: acon: II. p. 145.). Caulis sterilis erectus cylindricus glabriusculus dentibus circiter 30. ramis totidem perfecte verticillatis simplicibus elongatis strictis 8-10-gonis, scapus evanidus vaginis laxis 30-dentatis dentibus cuspidatis longioribus quam in caule sterili. Stirps omnibus partibus valde major quam prior, varians 1. scapo polystachyo; 2. caule sterili apice fructifero; 3. ramis frondis sterilis fructiferis; 4. verticillis spiralibus (VAUCH: t. 2. A). Huc pertinent sec: VAUCH: *E. maximum* LAM., *heleocharis* et *Telmateja* EHRH., *eburneum* SCHREB: et *monostachyon* POIR:

\* 3. *E. sylvaticum* = L. sp: 1516. = Spr: syst: IV. 10. = Fl: dan: t. 1182. Vauch: monogr: p. 37. t. 3. (*Eur.*, *Asia*, *Amer.*: bor: *Pedem.*: passim in sylvis sub-humidis sive montanis sive subalpinis ALL: n. 2380.). Caulis sterilis erectiusculus striatus flexilis leviter hispidulus dentibus circiter 12. ramis totidem perfecte verticillatis repetito-ramosis arcuato-deflexis sub-tetragonis, scapus sub-ramosus ramis depauperatis. Stirps perfecte verticillaris transitum faciens a difformibus ad uniformes. *E. umbrosum* W. et VAUCH:



monogr: p. 38. t. 4. videtur sola var: ramis *simplicibus sub-triquetris*.

## 2. *Caulibus uniformibus.*

\* 4. *E. palustre* = L. sp: 1516. = Spr: syst: IV. 10. = Fl: dan: t. 1183. Vauch: monogr: p. 39. t. 5. (*Eur.*; *Amer.*: bor: *Pedem.*: in pratis spongiosis ALL: n. 2382. RE fl: segus: p. 83. Secus *Padum* in locis spongiosis RE fl: tor: II. p. 176. In uliginosis *Ticini* et *Padi* BIROLI fl: acon: II. p. 145. *Sardin.*: in palustribus vulgatissima var:  $\gamma$  SM: MORIS st: sard: I. p. 53.). Caules sulcati glabriusculi longe ramosi apice spica medioeri terminati dentibus abbreviatis 8 - 10. ramis totidem, scapi abortivi hinc imperfecte verticillati generatim simplices tetragoni. Variat 1. ramis fere omnibus brevi - spicigeris (*E. polystachyon* C. BAUH.); 2. caulibus fructiferis fere nudis vaginis dilatatis (*E. veronense* POLL:?). Possideo ex hb: BIROLI sub nomine *E. Halleri* plantam medium tenentem inter citatas varr: Aliam var: inveni *Pollone* secus rivulum *del Cantone di Bocca* dictum, ramis omnibus plus minus ramulosis scabriusculis, ramulis constanter tetragonis uti rami, vaginulis tenuissime 4 - dentatis.

\* 5. *E. elongatum* = W. sp: 5. 8. = Spr: syst: IV. 10. *E. ramosissimum* Desf: non W. nec Humb: = Vauch: monogr: p. 41. t. 6. (*Eur.*: austr.; *Afr.*: bor: *Pedem.*: prope *Lucengo* reperit RE fl: tor: II. p. 176. et app: II. p. 206.). Caules elati striati scabriusculi

ramosissimi vaginis amplis dentibus 8 - 16. aristatis, rami inferiores ramulosi ramulis sub - oppositis sex - sulcatis superiores sub-simplices, spicæ breves ad ramorum ramulorumque apicem. *E. ramosissimum* W. et Humb: est species ex Amer: et pertinet ad *E. giganteum* L. sp: 1517. sec: VAUCH: monogr: p. 42. t. 7.

\* 6. *E. limosum* = L. sp: 1517. = Spr: syst: IV. 11. = Vauch: monogr: p. 44. t. 8. (*Eur: Pedem:* abunde locis inundatis sec: *Ticinum* ALL: n. 2384. Circa lacum *M. Cenisii* RE fl: segus: p. 83. Prope *l'Alloggia* et *Venariam* RE fl: tor: II. p. 176. In uliginosis vallis *Ticini* et lacus *Verbani* frequens BIROLI fl: acon: II. p. 145.). Caulis glaber striis 14. circiter dentibus totidem breviusculis acutis adpressis nigrescentibus, rami imperfecte verticillati ante anthesim breves ac fere nulli dein elongati simplices, spicæ mediocres oblongæ quandoque abortivæ. Variat multimode, speciatim ramorum numero eorumque longitudine, inflorescentia quandoque parcissima interdum polystachya (*E. polystachyon* SERING: sec: VAUCH: l. c.). Cll: W. et SPR: putant, *E. limosum* ALL: pertinere ad *E. vaginatum* SCHLEICH: idem ac *E. multiflorum* VAUCH: l. c. p. 51. t. 12., sed nec inter synonyma nec inter varr: hujusce stirpis polymorphæ a VAUCH: enumeratas ALL: planta refertur. Specim: mea ad verum *limosum* ejusque varr: spectant. Ceterum *E. multiflori* synon: valde confusa. Cons: etiam DC. fl: fr: suppl: p. 245. sub *E. ramoso*. Hoc invenit in montibus *Monregalensibus* cl: RE app: I. p. 38.

\* 7. *E. hyemale* = L. sp: 1517. = Spr: syst: IV. 10. = Vauch: monogr: p. 46. t. 9. (*Eur:, Asia, Amer:*

bor: *Pedem*: secus fluvios atque locis quæ per inundationem flumina alluunt ALL: n. 2385. Secus aquas in locis arenosis et in dumetis sub-humidis RE fl: sègus: p. 84. Secus *Sturam* et *Padum* RE fl: tor: II. p. 176. In uliginosis *Ticini* BIROLI fl: acon: II. p. 146.). Caulis elatus scaberrimus sub-nudus striis 15-18. dentibus totidem brevibus truncatis pilo caduco terminatis vel evanidis, vaginæ basi apiceque nigræ medio rubellæ, spica nigrescens compacta breviuscula interdum spiculis basi instructa sæpe abortiens. Stirps ob maximam asperitatem ceteris aptior ad expolienda metalla.

*Species dubia.*

8. *E. bogotenga* = Kunth? Ita in scheda specim: missi a BERTERO ex *Rancagua*. Deest fructificatio. Herba quadrat cum descript: KUNTH in H. et B. nov: gen: I. p. 42. præter caules qui in specim: meis non *simplices* sed *ramosi* adparent quamquam rami non semper dentes vaginæ (4) adæquent; sæpius 2. tantum exstant, alii evanidi vel prorsus abortientes.

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## DIVISIO II.

### Plantæ CELLULARES, seu ACOTYLEDONEÆ

*Char: essentialis.*

» Solo contextu celluloso donatæ, vasis lymphaticis vero epidermide stomatibus et cotyledonibus destitutæ, nunc prorsus homogenæ, nunc heterogenæ quidem sed organis externis valde imperfectis, proinde aliæ *foliosæ* aliæ *aphyllæ*. »

#### CLASSIS I.

##### FOLIACEÆ

(DC. théor: élém: p. 220. = *Musci* Auctor:)

*Char: essent:*

» Expansiones folia simulantes, sexus adparens. »

#### ORDO CXCIX.

##### BRYACEÆ

(Bartl: ord: nat: p. 12. = *Musci frondosi* Auctor: = J. S. Hill: fam: I. p. 28. t. 5. = Inter *Acrobyras* subcl: II., *Ananthas phyllidiophoras* coh: II., *Axylinas astomas* ser: 1., *Muscos frondosos* fam: 4.

Mart: consp: regn: veget: p. 2.).

*Char: essentialis.*

» *Perichætium* (*perigonium*, *folia floralia*) calycis vicem gerens e foliolis sæpe coloratis in discum.

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» stellulam capitulum vel rosulam dispositis, flores  
 » hermaphroditos vel dielines cingentibus. MASCULI  
 » (*gemmulæ, utriculi*) corpuscula cylindracea filis ar-  
 » ticularis sterilibus (*paraphyses, nectaria*) intermixta.  
 » FOEMIN: *Ovaria* cylindracea iisdem filis intermixta  
 » sæpius unum tantum raro plura fertilia, *indusio*  
 » clausa, post anthesim illud erumpentia cujus pars  
 » inferior (*vaginula*) in perichætio persistit, superior  
 » autem extensorii ad instar (*calyptra*) legit plus  
 » minus ovarium ipsum abiens demum in fructum  
 » capsularem sæpius pedicello (*seta*) suffultum rarius  
 » sessilem. *Capsula* hæc (*sporangium, theca, urna*)  
 » constat duabus membranis, exteriore coriacea, in-  
 » teriore membranacea exteriori adnata vel solubili;  
 » utraque sub apice *operculo* deciduo circumscissa,  
 » rarius indehiscens, *calyptra* caduca superata basi  
 » quandoque tuberculo carnosio (*apophysis*) adaucta;  
 » intus axis centralis plus minus productus (*colu-*  
 » *mella*) pulvere repletus; os capsulæ (*stoma*) nunc  
 » nudus nunc cinctus *peristomio* ciliato aut dentato,  
 » ciliis simplici vel duplici ordine dispositis (*peristo-*  
 » *mium* exterius et interius), rarissime clausus (*Musci*  
 » *astomi*). *Sporæ* (*semina?*) columellæ vel interiori  
 » capsulæ membranæ affixæ absque elateribus nume-  
 » rosissimæ pulverulentæ globulosæ. »

*Obs:* Ordo habitu prorsus proprio, naturalissimus  
 et numerosissimus, varie ab Auctoribus in plures clas-  
 ses familias vel sectiones considerationibus diversis di-  
 visus, concinne illustratus, inter alios, a celeberrimis  
 HEDWIG, WALKER ARNOTT, SCHWÆGRICHEN, WEBER  
 et MOHR, HOOKER et TAYLOR, PALISOT DE BEAUVOIS,

BRIDEL, etc. Plantæ per orbem sparsæ præsertim in regionibus temperatis locis humidis umbrösisve, terræ, arboribus vel saxis affixæ, humiles perennes statu sicco emarcidæ humido reviviscentes, paucæ annuæ, caule seu *surculo* simplici vel ramoso, foliis primariis sæpius confervoides ramosis caulinis sparsis vel distichis imbricatisve sessilibus simplicibus integris vel serrulatis glabris sæpius diaphanis reticulatis seu areolatis enerviis vel nervo medio plus minus producto præditis, sexu adhuc obscuro, proinde systemata ab illo desumta valde incerta immo fallacia (1). Organum perspicuum habemus in capsula, cujus ideo partes et præcipue præsentia et situs vel defectus *setæ*, præsentia ac structura *peristomii* et numerus ejusdem dentium ciliorumque, ac demum forma *calyptræ* specialim inserviunt pro characteribus genericis; ceteræ autem ejusdem capsulæ notæ et surculorum foliorumque structura melius ad stirpes determinandas adhibentur. In hac difficillima inspectione circa stirpes indigenas maximum nobis præbuit auxilium cl: M. D. JOS: DE-NOTARIS Bryologiæ mediolanensis una cum D. JOS: BALSAMO conditor, cui singulas stirpes herbarium meum sistentes communicavi, cujusque distributionem parum a Dubyniana recedentem, etiam quoad ordinis sectiones, sequendam duxi utpote faciliorem,

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(1) Capsulam pro *anthera*, sporas pro *polline*, gemmulas pro organis *foemineis* habuit D. LINN.; capsulam pro solo organo *foemineo*, sporas pro *seminibus*, gemmulas pro *musculis* HEDW.; capsulam pro flore *hermaphrodito*, sporas pro *polline*, columellam pro vero *fructu* intus *seminifero* PALISOT DE BEAY:!



non omissis stirpibus quas in *Mantissa muscorum ad floram pedemontanam* ipse nuperrime edidit (Act: acad: taur: vol. XXXIX. sub prælo).

Trib: I.

POLYTRICHOIDEÆ (Arn: disp: meth: p. 316. =  
Bals: et Denot: prodr: p. 1.).

- I. POLYTRICHUM Lin: syst: ed: Murr: n. 1172. = Hook: et Tayl: musc: brit: p. 42. t. 1. = Brid: bryol: univ: II. p. 134. t. VII. f. 2. = Spr: syst: n. 3319. = Lam: ill: t. 874. = Bals: et Denot: prodr: p. 1. = *Polytrichi*, *Catharineæ*, *Oligotrichi*, *Pogonati* et *Atrichi* spec: nonnullæ quorund: (Inter *Acrocarpos epistomos* Brid: bryol: univ: II. p. 134.).

» *Seta* terminalis. *Perist*: exter: dentibus 32. vel  
» 64. brevibus incurvis æquidistantibus, inter: hori-  
» zontale dentium apicibus connexum. *Calyptra* dimi-  
» diata pilis numerosis indusiata interdum simplex. »

*Obs*: Genus constans ex Spr: 35. stirpibus per orbem sparsis, quarum tertia pars circiter europæa.

\* 1. *P. juniperinum* = Hedw: sp: p. 89. t. 13. = Spr: syst: IV. 175. = Brid: bryol: univ: II. 136. Bals: et Denot: Prodr: p. 18. *P. commune*  $\beta$  L. sp: 1573. Dill: musc: t. 54. f. 3. (In pascuis sylvaticis montosis siccis sub-udisque totius *Eur*:, *Asiæ* min:, *Orient*: *Pedem*: abunde in sylvis siccis et montibus DENOT: mant: n. 1. *Sardin*: in sylvestribus montanis MORIS st: sard: III. p. 16.). Caulis sub-simplex basi repens, folia lineari-lanceolata integerrima dorso sub-

lævia margine membranaceo introrsum plicato, capsulæ tetraëdræ operculo brevissimo conico.

\* 2. *P. septentrionale* = Sw: = Spr: syst: IV. 175. = Hook: et Tayl: musc: brit: p. 45. t. 10. *P. sexangulare* Brid: bryol: univ: II. p. 145. ex Hoppe. *P. crassisetum* DC. fl: fr: n. 1270. (In alpib: *Eur: Pedem:* in alpibus editioribus præsertim *Novariens:* Denot: mant: n. 2.). Differt a priori statura generatim *minori*, caule *simplicissimo*, foliis lineari-subulatis, capsulis *hexaëdris* globosis, seta crassiuscula flaccida superne flavescente.

\* 3. *P. piliferum* = Schreb: spic: fl: lips: p. 74. = Spr: syst: IV. 175. = Hook: et Tayl: musc: brit: p. 44. t. 10. Bals: et Denot: prodr: p. 18. *P. commune* γ L. sp: 1573. Dill: musc: t. 54. f. 3. (In collibus ericetis et sylvis *Eur.*, *Amer:* bor:, *Afr:* insulis et *Australas:* *Pedem:* vulgare in ericetis et locis apricis montanis. Habeo ex ericetis *Sabaud:* a Perret:). Caulis simplex abbreviatus inferne nudus, folia conferta patentiuscula lineari-subulata apice pilifera, capsulæ elongato-tetraëdræ, operculum planiusculum rostellatum.

\* 4. *P. commune* = L. sp: 1573. excl: varr: = Spr: syst: IV. 174. Brid: bryol: univ: II. p. 148. = Hook: et Tayl: musc: brit: p. 46. t. 10. excl: var: β. Dill: musc: t. 54. f. 1. *P. juncifolium* Ehrh: *P. perigoniale* Michx: (Cum priori. *Pedem:* nil frequentius in sylvis ubique All: n. 2433. Re fl: segus: p. 86. et fl: tor: II. p. 212. Bîoli fl: acon: II. p. 155.). Omnium majus, caulis erectus simpliciusculus, folia linearia acuminata patula reflexa margine carinaque

serrata, capsula oblongo-tetraëdra erecta demum cernua, operculum planum pyramidatum. Auctores pedemontani supra citati sub *P. commune* videntur comprehendere etiam *P. juniperinum* et *formosum*.

\* 5. *P. formosum* = Hedw: sp: p. 92. t. 19. = Spr: syst: IV. 174. Brid: bryol: univ: II. p. 151. Bals: et Denot: prodr: p. 19. = *P. commune* β, *attenuatum* Hook: et Tayl: musc: brit: p. 47. Dill: musc: t. 54. f. 2. (*Eur.*, *Amer.* bor: *Pedem.* in sylvis cum priori BALB: el: p. 7. In sylvis collium *Taurinens.* RE fl: tor: II. p. 212. *Sardin.* in sylvestribus humidis MORIS st: sard: III. p. 16. ). Vix differt a præcedenti statura generatim minori, foliis margine tenuioribus et pellucetibus, capsula semper erecta, operculo conico rostrato.

\* 6. *P. urnigerum* = L. sp: 1573. = Spr: syst: IV. 175. = Hedw: sp: p. 100. t. 22. f. 5. 7. Bals: et Denot: prodr: p. 21. Sub *Pogonato* Brid: bryol: univ: II. p. 124. (*Eur.*, *Asia*, *Amer.* *Pedem.* in sylvis alpium *di Viù*, *Locana* et *Tarantasia* frequens ALL: n. 2435. Habeo etiam ex monte *de Pugny* supra *Aix* in *Sabaud.* a PERRET). Caulis ramosus vel simplex ramis erectis, folia lanceolata acuminata margine plana serrata carinaque scabrida, capsula cylindrica erecta apophysi nulla, operculum e basi convexa rostellatum.

\* 7. *P. alpinum* = L. sp: 1578. = Spr: syst: IV. 175. = Hedw: sp: p. 92. t. 19. f. 2. 6. Sub *Pogonato* Brid: bryol: univ: p. 129. excl: var: δ (*P. septentrionale* Sw:). *Polytrichum arcticum* Sw: (*Eur.*, *Amer.* bor: *Pedem.* in sylvis apricis montanis et sub-



alpinis frequentissimum ALL: n. 2434. In alpidibus *Vallesie* et *Pedem*: RE app: II. p. 206. sub *P. arctico*. In ericetis et pascuis montanis non desideratur BIROLI fl: acon: II. p. 156.). Habitus præcedentis, a quo differt capsula ovata oblonga basi paullo angustata sub-apophysata, operculo in rostrum longius producto, foliisque angustioribus.

\* 8. *P. aloides* = Hedw: musc: I. p. 37. t. 14. = Spr: syst: IV. 176. Bals: et Denot: prodr: p. 22. Sub *Pogonato* Brid: bryol: univ: II. p. 119. *Mnium polytrichoides*  $\beta$  L. sp: 1576. = Dill: musc: t. 58. f. 7. (*Eur*: passim. *Pedem*: in humidis sylvis inter *la Veneria* et *Rubianetta*, tum in sylvaticis *di Borgomasino* ALL: n. 2446. sub *Mnio polytricoideo*? Ad viarum ripas in castanetis locis umbrosis RE fl: segus: p. 86. sub eod: Ad margines viarum locis editioribus umbrosisque collium *Taurinens*: BALB: fl: taur: p. 177. sub eod: ? In vinea *Righini* collium *Taurinens*: RE fl: tor: II. p. 213. et app: I. p. 39. sub *P. aloideo*. *Sardin*: in apricis *Arizzo* MORIS st: sard: III. p. 16. Habeo ex *Sabaud*: sylvis a PERRET). Nanum subsimplex, folia lineari-lanceolata argute serrata, capsula cylindrica sub-erecta, operculum curvirostrum. Planta ALL: et BALB: videtur potius spectare ad seq: ex syn: DILL:

\* 9. *P. nanum* = Hedw: musc: I. p. 135. t. 13. = Spr: syst: IV. 176. Bals: et Denot: prodr: p. 23. Sub *Pogonato* Brid: bryol: univ: II. p. 117. *Mnium polytrichoides*  $\alpha$  L. sp: 1576. = Dill: musc: t. 55. f. 6. (*Eur*: , *Amer*: bor: *Pedem*: cum priore et speciatim ad vias in editioribus collibus *Taurinensib*: RE

fl: tor: II. p. 212. In ericetis *Burgimaneri* etiam ad viam occurrit BIROLI fl: acon: II. p. 157. sub *Mnio polytrichoides*?). Vix differt a priori, cujus forsau var: , statura generatim duplo *minori* , ac præsertim capsulis *turbinato-globosis nutantibus*.

\* 10. *P. undulatum* = Hedw: musc: I. p. 43. t. 16. 17. = Spr: syst: IV. 177. Bals: et Denot: prodr: p. 24. *Bryum undulatum* L. = Dill. musc: t. 46. f. 18. *Catharinea undulata* Web: et Mohr: Brid: bryol: univ: II. p. 102. excl: var:  $\beta$  *minus*. Sub *Oligotricho* DC. fl: fr: n. 1281. (*Eur: , Amer: bor: Pedem: in sylvis vulgatissimum* ALL: n. 2458. sub *Bryo*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p. 159.). A reliquis stirpibus calyptra pilis paucis sursum directis hispida jam recedit; folia lineari-lanceolata dorso papillosa margine et carina serrata membranacea nervo in pagina superiore lamellis 4-5. instructo, capsula oblongo-cylindracea incurva, operculum e basi convexa subulata rostratum.

\*? 11. *P. angustatum* = Denot: mant: n. 3. = *P. undulatum* var:  $\beta$  *minus* Bals: et Denot: prodr: p. 25. = Dill: musc: t. 46. f. 9. (In collibus circa urbem *Novariæ* et ad *Verbanum* frequentissimum DENOT: mant: l. c.). Differt a priori, cujus var: ex SPR:, caule *breviori*, nervo in foliis *lato-6-7-lamelato*, lamellis *flexuosis*, capsula *sub-erecta angustiore*.

## Trib: II.

BRYOIDEÆ (Arn: disp: meth: p. 288. =

Bals: et Denot: prodr: p. 21.).

II. BARTRAMIA Hedw: stirp: II. p. 111. = Hook: et Tayl: musc: brit: p. 144. t. 3. = Spr: syst: n. 3334. = Brid: bryol: univ: II. p. 32. tab: VI. f. 4. = *Bryi*, *Mnii*, *Hypni*, *Leskeæ* et *Philonitidis* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Caps*: sub-globosa. *Perist*: exter: dentibus 16., inter: membrana divisa in 16. segmenta integra vel 2-fida cum dentibus perist: » exter: alternantia. *Calyptr*: dimidiata. »

*Obs*: Genus constans ex SPR: 19. stirpibus per orbem sparsis, inter quas 5-6. europææ.

\* 1. *B. pomiformis* = Hook: et Tayl: musc: brit: p. 145. t. 23. = Brid: bryol: univ: II. p. 39. Spr: syst: IV. 192. Bals: et Denot: prodr: p. 28. Sub *Bryo* L. sp: 1580. = Dill: musc: t. 44. f. 1. (*Eur*: , *Amer*: bor: *Pedem*: ad rupes et muros aqua lente fluente irriguos ubique ALL: n. 2451. sub *Bryo*. RE fl: segus: p. 86. sub eod: In locis umbrosis ac speciatim in nemoribus vineæ *di Quinto* RE fl: tor: II. p. 198. sub *Bartramia*. In umbrosis alpium vulgaris præsertim ad rupes irriguas ad montem *dei Frati di Romagnano* etc. BIROLI fl: acon: II. p. 158. sub *Bryo*. *Sardin*: ad rupes et in sylvis *Arizzo* MORIS st: sard: III. p. 13.). Caulis erectus sub-ramosus, folia imbricata patentia linearia serrata nervo apicem attin-



gente, capsula globosa sulcata cernua, operculum conicum obtusum. Variat statura majori, caule valde ramoso, foliis siccitate crispis (*B. crispa* BRID: l. c. p. 41. aliiq̃ue).

\* 2. *B. ithyphylla* = Brid: bryol: univ: II. p. 43. = Hook: et Tayl: musc: brit: p. 145. t. 22. = Spr: syst: IV. 193. Bals: et Denot: prodr: p. 28. *B. pomiformis* Sw: excl: syn: L. et Dill: (*Eur: passim. Pedem: in alpibus ad terram vulgaris. Sardin: in montanis umbrosis humidis MORIS st: sard: III. p. 13.*). Accedit ad var: *minorem* prioris, cum qua sæpe confusa a Botanicis nostratibus, sed differt foliis sub-erectis rigidiusculis siccitate adpressis nervoque lato folium paullo supra basim ad apicem explente, coloreque ipsorum foliorum intense et amæne viridi.

\* 3. *B. Oederi* = Sw: in Schrad: journ: 1800. 2. p. 181. = Brid: musc: rec: p. 136. t. 2. f. 9. et bryol: univ. II. p. 46. = Spr: syst: IV. 192. Bals: et Denot: prodr: p. 181. *B. gracilis* Flork: Hook: et Tayl: musc: brit: p. 146. t. 23. (*Eur: passim. Pedem: ad rupes in alpibus BALB: el: p. 4.*). Parum quoque differt a *B. pomiformi* foliis laxis lineari-lanceolatis carinatis reflexis intense viridibus, capsula parva. Variat in alpibus editioribus caulibus brevioribus compacte cæspitosis, fructu minori, colore foliorum minus intense viridi (*B. Oederi*  $\beta$  *alpina* SCHWÆGR: *B. Oederi*  $\beta$  *condensata* BRID:). Hanc habeo ex alpibus *Helvæt: sub nomine B. microcarpæ.*

\* 4. *B. Halleriana* = Hedw: musc: II. p. 171. t. 40. = Spr: syst: IV. 194. = Brid: bryol: univ: II. p. 33. *Bryum laterale* L. fil: fl: lapp: ed: nov: p. 327.

alique. ( In alpinis et subalpinis fere totius *Eur*: *Pedem*: nil frequentius ad pedes arborum , viarum margines et rupes in montibus fere omnibus *Denot*: mant: n. 4. ). Caulis erectus ramosus , folia lineari-setacea apice serrulata , seta brevis lateralis sub-incurva.

\* 5. *B. fontana* = Sw: in Schrad: journ: II. p: 183. t. 3. f. 1. = Spr: syst: IV. 193. Bals: et Denot: prodr: p. 29. Sub *Philonotide* Brid: bryol: univ: II. p. 18. Sub *Mnio* L. sp: 1574. alique. = Dill: musc: t. 44. f. 2. ( *Eur*: passim. *Pedem*: locis spongiosis ad fontium scaturigines ubique *All*: n. 2437. sub *Mnio*. *Re* fl: segus: p. 86. sub eod: et fl: tor: II. p. 198. sub *Bartramia*. *Biroli* fl: acon: II. p. 156. sub *Mnio*. *Sardin*: juxta rivulos in montibus *Moris* st: sard: III. p. 16. sub *Philonotide* ). Elongata fastigiato-ramosa , folia dense imbricata rigidiuscula ovato-lanceolata longe acuminata serrata nervo excurrente capsula sulcata cernua , operculum conicum breve. Variat pro loci natalis conditione , statura graciliori , foliis late ovatis plus minus patentibus.

III. *FUNARIA* Schreb: gen: pl: p. 760. = Hook: et Tayl: musc: brit: p. 121. t. 2. = Spr: syst: n. 2344. = Brid: bryol: univ: II. p. 49. t. VI. f. 7. = *Mni* spec: quæd: L. ( Inter *Acrocarpos peristomos* Brid: bryol: univ: II. p. 49. ).

» *Seta* terminalis. *Perist*: exter: dentibus 16. obli-  
 » quis apice cohærentibus , inter: dentibus totidem  
 » exterioribus oppositis horizontalibus membranaceis.

» *Calyptr*: mitræformis magna basi ventricoso - tetragona. »

*Obs*: Genus constans ex Spr: 6. stirpibus quarum major pars europæa.

\* 1. *F. hygrometrica* = Hedw: sp: p. 172. = Hook: et Tayl: musc: brit: p. 121. t. 20. = Spr: syst: IV. 216. Brid: bryol: univ: II. p. 51. Bals: et Denot: prodr: p. 30. Sub *Mnio* L. sp: 1575. Dill: musc: t. 52. f. 75. (In *Eur*: limosis passim. *Pedem*: in pascuis ad muros frequens ALL: n. 2441. sub *Mnio*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p. 202. sub *Funaria*. BIROLI fl: acon: II. p. 156. sub *Mnio*. *Sardin*: in montanis humidis vulgatissima MORIS st: sard: II. p. 14.). Caulis simplex brevissimus, folia ovata concava integerrima nervo excurrente, seta incurva, capsula pyriformis sulcata, operculum planiusculum.

2. *F. Fontanesii* = Schwægr: suppl: 1. 2. p. 79. t. 66. Brid: bryol: univ: II. p. 56. (*Lusitan*:, *Ital*:, *Ægypt*:, *Afr*: bor: *Sardin*: ad fossas et in pascuis frequens MORIS st: sard: III. p. 14.). Differt a priori statura multo minori, foliis rosulatis oblongis subserratis laxè reticulatis nervo ante apicem desinente, seta recta capsulaque parum sulcata.

IV. *PTYCHOSTOMUM* Hornsch: new bot: Zeit: p. 62. = Brid: bryol: univ: I. p. 597. tab: V. f. 6. = *Cynodontii*, *Cynodontis*, *Didymodontis* et *Bryi* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid: l. c.).

» *Seta* terminalis. *Perist*: exter: dentibus 16. erectis superne hyalinis, inter: membrana hyalina pli-



» cata dentibus adhærens eosque in conum connectens.  
 » *Calypt*: cuculliformis. *Caps*: æqualis obovata. »

*Obs*: Genus *Bryo* valde affine, constans ex BRID:  
 4. stirpibus quarum 3. europææ, altera ex ins: *Melville*.

1. *Pt*: *compactum* = Hornsch: l. c. Brid: l. c. p. 598. *Bryum demissum* var: Hook: Spr: syst: IV. 211. (In alpib: *German*: *Sardin*: ad margines agrorum MORIS st: sard: III. p. 16.). Humillimum, folia ovata cuspidata arcte imbricata, seta longiuscula læte coccinea, capsula inclinata, operculum mamillare obtusum.

V. MEESIA Hedw: musc: I. p. 56. t. 21. 22. = Spr: syst: n. 3335. = Brid: bryol: univ: II. p. 59. tab: VI. f. 8. pro *Meesia* et f. 9. pro *Diplocomio* = *Mnii*, *Diplocomii* et *Brii* sp: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid: ).

» *Seta* terminalis. *Perist*: exter: interiore brevius  
 » dentibus 16. brevissimis, inter: e ciliis totidem  
 » varie lacunosus membrana reticulata fugacissima  
 » connexis. *Calyptr*: cuculliformis angusta. *Caps*: inæ-  
 » qualis pyriformis. »

*Obs*: Genus constans ex SPR: 3. stirpibus europæis, 1. etiam americana.

\* 1. *M. longiseta* = Hedw: musc: l. c. = Spr: syst: IV. 194. Sub *Diplocomio* Brid: l. c. p. 66. *Mnium triquetrum* L. sp: 1578. aliique = Dill: musc: t. 51. f. 72. (*Eur*: palustribus. *Pedem*: locis spongiosis et subalpinis ALL: n. 2448. sub *Mnio triquetro*. Secus *la Negoja* ad lacum *Cusii* BIROLI fl: acon: II.

p. 157.). Elongata sub-ramosa, folia sub-trifaria ovato-lanceolata carinata, seta fere 2-pollicaris rubens.

\* 2. *M. dealbata* = Sw: musc: suec: p. 44. et 94. t. 5. f. 10. = Spr: syst: IV. 194. = Brid: bryol: univ: II. p. 63. Sub *Bryo* Dill: aliiq (Eur: bor: et med: In udis alpium *Pennin*: DENOT: mant: n. 5. Habeo ex alpiibus *Sabaud*: a PERRET). Differt a priori statura minori, seta duplo breviori, foliis lanceolatis planis acutis superne serratis, ab omnibus peristomii externi dentibus internis sub-æquantibus, foliis sub-diaphanis.

\* 3. *M. minor* = Brid: sp: musc: III. p. 103. et bryol: univ: II. p. 62. Musc: rec: II. part: III. p. 168. t. 2. f. 13. = *M. uliginosa*  $\beta$  *minor* Spr: syst: IV. 194. ex Schwægr: (In alpi: *Lappon*: , *Helvet*: et *Sabaud*: BRID: l. c. *Pedem*: in montibus editioribus prov: *Novariens*: et ex alpiibus *Pennin*: DENOT: mant: n. 6.). Erecta sub-ramosa ramis junioribus fructificantibus, folia lineari-lingulata obtusa siccitate adpressa, setæ flexuosæ, capsula cernua operculo centro depresso.

\* 4. *M. uliginosa* = Hedw: musc: I. p. 1. t. 1. 2. = Spr: syst: IV. 194. Brid: bryol: univ: II. p. 60. Sub *Mnio* Gmel: *Bryum trichodes* L. sp: 1584. aliiq = Dill: musc: t. 49. f. 58. (In paludibus *Eur*: et *Amer*: bor: *Pedem*: in sylvis umbrosis montanis terraque humida arenosa ALL: n. 2470. sub *Bryo trichode*). Differt a priori statura *majori*, foliis siccitate *sub-patentibus*, seta *vix flexuosa*, et præsertim operculo constanter centro *prominulo*.

VI. *POHLIA* Hedw: musc: I. p. 96. t. 36. = Spr: syst: n. 3332. = Brid: bryol: univ: I. p. 607. tab: V. f. 8. = *Hemisynapsii*, *Bryi*, *Paludellæ*, *Weberæ*, *Mnii*, *Amphirrhini*, *Lagenii* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Perist*: exter: dentibus 16. acutis, inter: membrana in 16. segmenta integra vel perforata divisa. *Calyptr*: dimidiata. *Caps*: æqualis » apophysata. »

*Obs*: Genus constans ex BRID: 15. stirpibus, ex SPR: 7. permultis europæis, difficile distinguendis ob maximam inter se se similitudinem.

\* 1. *P. elongata* = Hedw: l. c. = Spr: syst: IV. 188. Brid: l. c. p. 68. = Sub *Bryo* Hook: et Tayl: musc: brit: p. 204. t. 30. Bals: et Denot: prodr: p. 50. aliique (*Eur*: fere totius sylvaticis subalpinis et montanis. *Pedem*: ex montibus *Limoni* a BELLARD; ex illis vallis *Intrascae* a DENOT:, ex alpib: *Sabaud*: a PERRET). Caulis sub-simplex, folia inferiora minuta dissita suprema in comam elongatam conferta lineari-lanceolata apice serrulata, capsula inclinata cum apophysi sub-æquali operculo convexo acuminato. Variat multimode præsertim statura ex loco natali.

\* 2. *P. brachycarpa* = Hornsch: bot: Zeit: II. p. 96. = Spr: syst. IV. 189. Brid: l. c. p. 616. = Funk: moostarch: p. 41. t. 26. sec: Brid: (Alpib: *Noric*: In nostrarum Alpium pascuis sterilibus vulgaris DENOT: mant: n. 8.). Vix differt a priori foliis fastigiatis confertis ovato-lanceolatis denticulatis, capsula cum apophysi breviori operculo breviori conico-mamillato.



\* 3. *P. læte virens* = Denot: mant: n. 7. (In alpib: Pennin: DENOT: l. c.). Accedit *P. cucullatæ* SCHWÆGR., sed differt foliis nequaquam carinatis nec incurvis nervo continuo instructis, peristomioque interno ciliis destituto.

\* 4. *P. cirrhifera* = Denot: mant: n. 9. (In spongiosis ad nives deliquescentes *Sempronii Ital:* versus DENOT: l. c.). A *P. demissa*, cui setarum foliorumque natura accedit, distat statura triplo majore, capsulæ forma, stomatis positione etc.

VII. BRYUM SW: = Hook: et Tayl: musc: brit: p. 192. t. 3. = Bals: et Denot: prodr: p. 33. = *Mnii* et *Bryi* spec: L. = Spr: syst: n. 3342. 3343. = Lam: ill: t. 873. pro *Bryo* et 875. pro *Mnio* = *Pohliæ*, *Bryi*, *Mnii*, *Diplocamii*, *Meesiæ*, *Arrhenopteri*, *Paludellæ*, *Acclacomnion*, *Weberæ*, *Hypni* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid: ).

» *Seta* terminalis. *Perist:* exter: dentibus 16. acutis  
 » reflexilibus internis sub-æqualibus, inter: membrana  
 » carinata vel plana in 16. lacinias integras vel per-  
 » foratas divisa ciliis interjectis. *Calyptr:* dimidiata. »

*Obs:* Genus inter omnes *Bryoideas* numerosissimum (80. spec: circiter ex BRID:, 58. ex SPR:), et pro stirpium determinatione difficillimum, exemplo ARN: et DUBY optime in 3. sectiones a cell: Prodr: bryol: mediol: Auctoribus divisum, sc: *Streptotheca* (capsula sulcata cernua); *Mnium* (capsula lævis, flores musculi discoidei, caulis simplex erectus inferne sub-denudatus); et *Briastrum* (capsula lævis, flores masculi gem-

miformes, caulis ramosus cæspitosus foliosus raro simplex).

Sect: I.

*Streptotheca.*

\* 1. *Br: palustre* = Sw: musc: suec: p. 46. = Hook: et Tayl: musc: brit: p. 115. t. 28. = Bals: et Denot: prodr: p. 33. Sub *Mnio* L. sp: 1574. Spr: syst: IV. 215. Brid: bryol: univ: II. p. 7. aliique. Dill: musc: p. 233. t. 31. f. 3. (In paludosis *Eur:*, *Asiæ* et *Amer:* *Pedem:* in pratis spongiosis atque ad fontium scaturigines ALL: n. 2438. sub *Mnio*). Subdichotome ramosum adscendens inferne totum radiculis ferrugineis stipatum, folia lutescentia erecto-patula lineari-lanceolata margine revoluta nervo ante apicem obtusum sub-surculatum evanescente, seta elongata purpurea, capsula oblonga operculo conico. Raro apud nos fructificat.

\* 2. *Br: androgynum* = Hedw: sp: 178. = Hook: et Tayl: musc: brit: p. 193. t. 28. Sub *Mnio* L. syst: p. 1574. Spr: syst: IV. 215. Brid: bryol: univ: II. p. 5. aliique = Dill: musc: p. 230. t. 31. f. 1. (*Eur:*, *Amer:* bor: *Pedem:* in sylvis inter arcem *Exilles* et jugum *Assiette* ALL: n. 2439. sub *Mnio*. Rarum ad radices arborum castanearum locis montanis RE fl: segus: p. 86. sub eod: In nemoribus prope *Supergam* RE fl: tor: II. p. 199. In sylvis montanis præsertim illis *d'Ornavasso* BIROLI fl: acon: II. p. 156. sub *Mnio*).  
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Differt a priori statura longe minori, foliis acutis serratis, capsulis cylindricis erectiusculis.

Sect: II.

*Mnium* (*Bryum Polla* Brid:) (1)

\* 3. *Br. roseum* = Schreb: spicil: fl: lips: p. 84. = Hook: et Tayl: musc: brit: p. 200. t. 29. = Spr: syst: IV. 214. Brid: bryol: univ: I. p. 696. Bals: et Denot: prodr: p. 34. Sub *Mnio* Hedw: sp: p. 194. alii- que. Sub *Hypno* Web: et Mohr: *Mnium serpyllifolium* γ L. sp: 1578. Dill: musc: t. 52. f. 77. (*Eur:* passim. *Pedem:* in sylvis ad margines viarum et pedes arborum vulgare DENOT: In humidis sylvaticis et secus rivulos frequentissimum ALL: n. 2447. sub *Mnio serpyllifolio*? RE fl: segus: p. 86. Secus aquæductus et ad sepes locis umbrosis vulgare varians foliis integerrimis et serratis BIROLI fl: acon: II. p. 157.). E basi repente erectum simplex, folia versus apicem caulis conferta rosulata obovato-spathulata acuminata serrata marginibus basi revolutis undulatis nervo apicem attingente saturate viridia nitentia. De identitate plantæ ALL: cum nostra valde dubito; forsani ibi plures species confusæ.

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(1) Valde singulare quod cl: BRID: sectionem hanc *Pollam* vocaverit ob setas plerumque plures ex eodem perichætio, cum hoc tantum in duabus vel tribus speciebus saltem ex europæis occurrat (obs: ex DENOT:)



\* 4. *Br: punctatum* = Schreb: spicil: fl: lips: p. 85. = Hook: et Tayl: musc: brit: p. 207. t. 30. = Spr: syst: IV. 213. Brid: bryol: univ: I. p. 706. Sub *Mnio* Hedw: sp: p. 193. aliiqve. Sub *Hypno* Web: et Mohr: *Mnium serpyllifolium*  $\alpha$  L. sp: 1577. Dill: musc: t. 53. f. 81. (In umbrosis udis fere totius *Eur*: Abunde in humidis pascuis RE fl: tor: II. p. 200. In *Sardin*: montanis humidis et juxta rivulos MORIS st: sard: III. p. 13.). Laxe cæspitosum radiculis ferrugineis stipatum, folia ovato-rotundata reticulata integra pellucida nervo ante apicem desinente margineque rutilantia, seta purpurea. Species elegantissima.

\* 5. *Br: cuspidatum* = Schreb: spicil: fl: lips: p. 34. = Hook: et Tayl: musc: brit: p. 209. t. 31. = Spr: syst: IV. 214. Brid: bryol: univ: I. p. 702. Bals: et Denot: prodr: p. 39. Sub *Mnio* Schwægr: suppl: 1. 2. p. 134. aliiqve. *Hypnum aciphyllum* Web: et Mohr: *Mnium serpyllifolium*  $\beta$  L. sp: 1577. Dill: musc: t. 53. f. 79. A L (*Eur*:, *Amer*: bor: *Pedem*: vulgatissimum ad margines viarum in pascuis sylvis etc. DENOT: In sylvis umbrosis vere et æstate RE fl: tor: II. p. 200. BALB: fl: taur: p. 178. et misc: alt: p. 36. *Sardin*: in sylvaticis umbrosis MORIS st: sard: III. p. 13.). Foliis decurrentibus obovatis acuminatis supra medium serratis nervo apicem excedente, capsula ovata pendula operculo hemisphærico facile distinguitur. Variat colore nunc fusco-viridi lurido, nunc pallido lætiore.

\* 6. *Br: hornum* = Schreb: spicil: fl: lips: p. 83. = Hook: et Tayl: musc: brit: p. 209. t. 31. = Spr: syst: IV. 215. Brid: bryol: univ: I. p. 695. Sub *Mnio*

L. sp: 1576. aliique. Dill: musc: t. 51. n. 71. (*Eur: passim. Pedem: locis sylvosus et rupestribus humidis ALL: n. 2443. sub Mnio. Ad vineam Righini RE fl: tor: II. p. 200?*). Habitus præcedentis sed majus et magis elegans, differt quoque foliis confertis lanceolatis acutis reticulatis serratis nervo infra apicem evanido, capsula ovato-oblonga operculo mucronulato. Species citata a cl: RE et a PERRET lecta videtur potius pertinere ad *Br: ventricosum*.

\* 7. *Br: marginatum* = Dicks: pl: crypt: brit: fasc: II. p. 9. t. 5. f. 1. = Hook: et Tayl: musc: brit: p. 208. t. 31. = Spr: syst: IV. 213. Bals: et Denot: prodr: p. 36. *Br: serratum* Brid: bryol: univ: I. p. 689. *Mnium serratum* Brid: sp: I. p. 34. aliique (*Eur: passim. Pedem: in sylvis montanis prov: Novar: et in alpinis Penninis DENOT: mant: n. 10.*). Priori affine, sed differt statura duplo minori, foliis laxis oblongo-lanceolatis margine coloratis nervo apicem excedente, capsula ovata, operculo conico brevi-rostrato. More præcedentis caulis, nervus foliorum, quandoque et tota pagina rufescunt.

\* 8. *Br: rostratum* = Schrad: spicil: fl: germ: p. 72. = Hook: et Tayl: musc: brit: p. 208. t. 30. = Spr: syst: IV. 213. Brid: bryol: univ: I. p. 700. Bals: et Denot: p. 37. *Bryum* et *Mnium longirostrum* Brid: meth: et musc: Sub *Hypno* Web: et Mohr: Dill: musc: t. 53. f. 80. (*Eur: passim in sylvis umbrosis, in udis collium et montium rupes quandoque late operiens DENOT:*). A congeneribus cito distinctum caule brevi centimetrum raro excedente, foliisque ex angusta basi oblongo-ovatis obtusis undulatis nervo

mucronatis margine denticulatis, setis ex eodem perichætio 2-pluribus, capsula oblonga pendula, operculo tandem rostrato.

\* 9. *Br. ligulatum* = Screb: spicil: fl: lips: p. 84. = Hook: et Tayl: musc: brit: p. 207. t. 30. = Spr: syst: IV. 214. Brid: bryol: univ: I. p. 708. Bals: et Denot: prodr: p. 35. Sub *Mnio* Brid: musc: *Br. undulatum* Turn: *Mnium undulatum* Weiss: aliique. *Mn: serpyllifolium* δ L. sp: 1578. Dill: musc: t. 52. f. 76. (*Eur:* passim. *Pedem:* vulgare ad oras sylvarum, viarum margines, et ad sepes in locis umbrosis. DENOT: Sub *Mnio* BALB: el: p. 6. In sylvis vineæ *Morozzo* alibique in collibus *Taurinens:* frequens RE fl: tor: II. p. 201. Habeo ex sylvis vallis *Intrasca* a DENOT: Ex *Sabaud:* ad terram locis udis a PERRET. *Sardin:* in montanis umbrosis *Arizzo* MORIS st: sard: III. p. 13.). Erectum ramis sterilibus elongatis repentibus, folia oblonga lingulata decurrentia undulata denticulata nervo excurrente mucronulata pallide viridia, setæ ex eodem perichætio plures (2 ad 12) purpureæ, capsula ovato-oblonga pendula operculo conico.

### Sect: III.

#### *Bryastrum.*

\* 10. *Br. ventricosum* = Dicks: pl: crypt: brit: fasc: I. p. 4. = Hook: et Tayl: musc: brit: p. 205. t. 30. = Spr: syst: IV. 213. Bals: et Denot: prodr: p. 45. (In humidis *Eur:* *Pedem:* ad rupes humidas et in spongiosis montanis alpinisque frequens DENOT:



Habeo ex fossulis infra *Chambery* a PERRET sub nomine *Br: borealis*. Var:  $\alpha$  ex alpiibus *Helvet.*, var:  $\beta$  ex *Sabaud.* ab eodem PERRET, var:  $\gamma$  ex alpiibus *Pen-ninis* a DENOT., var:  $\delta$  ex rupibus alpium *Novariens.* ab eod:). Elongatum ramosum, folia laxè imbricata erecto-patentia plus minus late oblonga sub-serrata nervo apicem excedente, capsula oblongo-ovata pendula operculo conico brevi. Variat  $\alpha$  (*Br: pseudotriquetrum* BRID: bryol: univ: I. p. 676.) foliis oblongo-lanceolatis acutis margine revolutis serrulatis;  $\beta$  (*Br: binum* BRID: l. c. p. 678.) foliis ovato-lanceolatis acuminatis immarginatis sub-integris;  $\gamma$  (*Br: Duvalii* BRID: l. c. p. 679.) foliis ovatis acutis decurrentibus integris;  $\delta$  (*Br: Schleicheri* BRID: l. c. p. 682.) foliis cordato-ovatis acuminatis integris. Ludit quoque caule magis minusve compacto cæspitoso radiculoso vel nudiusculo, ramis nunc brevibus fastigiatis radiculosive nunc elongatis gracilibus setas longitudine sub-æquantibus, foliis plus minus laxis vel confertis magis minusve decurrentibus, capsulis oblongo-pyriformibus ventricosis vel turbinatis obovatisque. Color etiam nunc flavo-virens, nunc saturate viridis.

\* 11. *Br: alpinum* = L. mant: II. p. 309. = Hook: et Tayl: musc: brit: p. 205. t. 28. = Spr: syst: IV. 211. Brid: bryol: univ: I. p. 663. Bals: et Denot: prodr: p. 47. Sub *Mnio* L. fil: Dill: musc: t. 1. f. 64. (Alpiib: *Eur.* Habeo ex locis humidis et rupibus vallis *Intrasca* a DENOT: *Sardin.* in editis montibus *Genargentu* juxta rivulos MORIS st: sard: III. p. 13.). Humile cæspitosum, folia arcte imbricata sanguineo-rufa nitentia siccitate adpressa lanceolata acuta sub-

serrulata nervo ad apicem producto, capsula pendula oblongo-ovata operculo convexo mucronato.

\* 12. *Br: turbinatum* = Sw: musc: suec: p. 49. = Hook: et Tayl: musc: brit: p. 202. t. 29. excell: synn: = Spr: syst: IV. 212. excell: synn: Bals: et Denot: prodr: p. 46. *Br: pallescens*, *Schleicheri*, et *pallens* Brid: bryol: univ: I. p. 681. Sub *Mnio* Hedw: aliique. Dill: musc: t. 51. f. 74. (*Eur: passim. Pedem: in udis collium Taurin: BALB: fl: taur: [p. 177. et misc: alt: p. 35. sub Mnio. RE fl: tor: II. p. 200. sub Bryo. Habeo ex rupibus madentibus in alpinis a DENOT:)*. Affine *Bryo ventricosus* n. 10., sed differt foliis laxis ovato-acutis marginibus sub-reflexis apice denticulatis nervoque eum vix excedente, capsula turbinata pendula operculo convexo mucronulato. Synonyma ad hanc stirpem incertissima; ex ipsis in prodr: bryol: med: p. 16. delenda *Polia inclinata*, *Bryum pallens*, *pallescens*, *Schleicheri*, *boreale* et *Webera intermedia*, monente ipso DENOT: in mss:

\* 13. *Br: pallescens* = Schwægr: suppl: 1. 2. p. 107. t. 75. = Brid: bryol: univ: I. p. 645. = *Br: turbinatum* var: Spr: syst: IV. 212. aliique. *Bryum* et *Webera intermedia* quorund: *Hypnum boreale* Web: et Mohr: (*Eur: passim. Pedem: ex alpinis Penninis habeo a DENOT:)*. Differt a priori, cui valde affine, statura ut plurimum minore, foliis confertis nervo longius ultra apicem producto, capsulae directione horizontali.

\* 14. *Br: cæspiticius* = L. sp: 1586. = Hook: et Tayl: musc: brit: p. 201. t. 29. = Spr: syst: IV. 211. Brid: bryol: univ: I. p. 669. Bals: et Denot:

prodr: p. 43. Dill: musc: t. 50. f. 66. (*Eur: Asia, Amer: bor: Pedem: muris innascitur ALL: n. 2471. RE fl: segus: p. 86. In muris et saxis collium, nec deest ad Ticini promontorium BIROLI fl: acon: II. p. 160. Sardin: ad fossas rupesque MORIS st: sard: III. p. 13.*). Cæspitibus compactis sericeo-viridibus, foliis arcte imbricatis ovatis acuminatis margine reflexis nervo apicem denticulatum vel întegrum excedente cuspidatis, capsula ovato-pyriformi inter congeneres facile eruendum.

\* 15. *Br: erythrocarpon* = Schwægr: suppl: 1. 2. p. 100. t. 70. non Brid: = Bals: et Denot: prodr: p. 44. = *Br: sanguineum* Brid: bryol: univ: I. 671. *Br: carneum* var: Spr: syst: IV. 670. (*Eur: passim. Pedem: in pascuis aridissimis DENOT:*). Differt a *cæspiticio* caulibus gracilioribus sed rigidis infra apicem brevi-ramosis, foliis caulinis ramisque late lanceolatis, perichætialibus ovato-acuminatis margine crassiusculo nervoque valido excurrente præditis rubescentibus, setis subtilibus capsulaque oblongo-pyriformi sanguineis, operculo convexo mucronato.

\* 16. *Br: capillare* = L. sp: 1586. = Hook: et Tayl: musc: brit: p. 200. t. 29. = Spr: syst: IV. 211. Brid: bryol: univ: I. p. 665. Bals: et Denot: prodr: p. 41. Dill: musc: t. 50. f. 67. (*Eur: passim. Pedem: ad muros ALL: n. 2473. Ad radices arborum in sylvis S. Petri di Morezzo BIROLI fl: acon: II. p. 157. sub Mnio. Habeo ex valle Intrasca ad muros a DENOT: Ex sylvis Sabaud: a PERRET. Sardin: in humidis umbrosis frequens MORIS st: sard: III. p. 13.*). A *Br: cæspiticio* distat foliis obovato-oblongis sub-



marginatis siccitate contortis nervo apicem longe excedente piliformi, capsula elongata pendula.

\* 17. *Br: argenteum* = L. sp: 1586. = Hook: et Tayl: musc: brit: p. 199. t. 29. = Spr: syst: IV. 210. Brid: bryol: univ: I. p. 657. Bals: et Denot: prodr: p. 41. Dill: musc: t. 50. f. 62. (*Eur:*, *Amer:* bor: *Pedem:* super muros et rupes locis montanis et subalpinis ALL: n. 2475. RE fl: segus: p. 86. In tectis et muris RE fl: tor: II. p. 199. Ad parietes, in tectis, et pascuis glareosis vulgare BIROLI fl: acon: II. p. 160. *Sardin:* ad muros, rupes et in arenosis MORIS st: sard: III. p. 13.). Humile cæspitosum albo-argenteo-nitens, folia arcte imbricata late ovata acuminata concava sub-serrata nervo apicem attingente, capsula ovato-pyriformis pendula operculo conico mammillato. Variat statura foliisque magis vel minus acuminatis.

\* 18. *Br: pyriforme* = Sw: musc: suc: p. 45. non L. = Hook: et Tayl: musc: brit: p. 196. t. 28. = Spr: syst: IV. 212. Brid: bryol: univ: I. p. 631. Bals: et Denot: prodr: p. 40. Sub *Webera* Hedw: musc: I. p. 5. t. 111. Sub *Mnio* L. sp: 1576. aliique. Dill: musc: t. 50. f. 60. (*Eur:*, *Amer:* bor: *Pedem:* in rupibus passim inter *Pinerolium* et *il Villar* ALL: n. 2444. sub *Mnio*. In locis humidis ad fossarum oras RE fl: segus: p. 86. sub eod: In agro *Taurin:* ad muros versus septentrion: RE fl: tor: II. p. 201. Habeo etiam ex valle *Intrasca* a DENOT:). Species elegans foliis subulato-setaceis flexuosis pulchre viridibus nervo latissimo instructis serrulatis, capsula exacte pyriformis pendula operculo convexo mammillato.

\* 19. *Br: crudum* = Huds: fl: angl: p. 491. = Hook:

et Tayl: musc: brit: p. 198. t. 28. = Spr: syst: IV. 214. Brid: bryol: univ: l. p. 693. Bals: et Denot: prodr: p. 51. Sub *Webera* Schwægr: Sub *Hypno* Web: et Mohr: Sub *Mnio* L. sp: 1576. aliique. Dill: musc: t. 51. f. 70. (*Eur*: passim. *Pedem*: sylvas et pascua inhabitat ALL: n. 2445. sub *Mnio*. Habeo ex alpibus *Penninis* et ex sylvis montanis a DENOT:). Erectum simplex, folia lanceolata denticulata pallide nitenti-viridia nervo ante apicem evanescente perichætialia angustiora, capsula oblonga sub-pyriformis nutans operculo convexo mammillato.

\* 20. *Br: nutans* = Schreb: spicil: fl: lips: p. 81. = Hook: et Tayl: musc: brit: p. 203. t. 29. = Spr: syst: IV. 212. Brid: bryol: univ: l. p. 634. Bals: et Denot: prodr: p. 50. Sub *Webera* Hedw: Sub *Hypno* Web: et Mohr: Dill: musc: t. 50. f. 61. (*Eur*: passim. *Pedem*: habeo ex alpibus prov: *Novar*: a DENOT: Ex locis humidis *Sabaud*: a PERRET. *Sardin*: in sylvaticis montanis MORIS st: sard: III. p. 13.). Cæspitosum, caulis plerumque simplex erectus brevis inferne sub-nudus, folia nitenti-viridia erecta lanceolato-acuminata apicem versus serrata nervo excurrente, seta purpurascens nitidissima, capsula oblongo-pyriformis pendula operculo convexo mucronulato.

\* 21. *Br: carneum* = L. sp: 1587. = Hook: et Tayl: musc: brit: p. 198. t. 29. = Spr: syst: IV. 214. Brid: bryol: univ: l. p. 652. Bals: et Denot: prodr: p. 44. et 48. *Br: delicatulum* et *pulchellum* Hedw: *Hypnum carneum* Web: et Mohr: Dill: musc: t. 50. f. 69. (*Eur*: passim. *Asia min*:, *Antillis*. *Pedem*: in umbrosis sub-humidis collinis frequens terraque in-

nascitur ALL: n. 2472. *Sardin*: ad fossas et margines agrorum *Iglesias* locis humidis MORIS st: sard: III. p. 13.). Simplex pumilum, folia laxiuscula erecto-patentia sub-disticha lanceolata reticulata sub-denticulata pallida nervo ante apicem desinente, seta carnea, capsula brevissima ovato-pyriformis pendula badio-fusca operculo convexo mucronulato.

\* 22. *Br: platyloma* = Schwægr: suppl: 1. 2. p. 116. t. 76. = Spr: syst: IV. 214. = Brid: bryol: univ: I. p. 668. (*Madera. Pedem*: repertum a DENOT: ad rupes in collibus calidioribus mant: n. 11.). Cæspitosum sub-ramosum, folia erectiuscula oblongo-ovata late marginata denticulata nervo crasso in cuspidem brevem producto, capsula pendula elongato-pyriformis operculo convexo mucronulato. Habitus *Br: capillaris* n. 16. satis refert monente BRID: l. c.

VIII. *HOOKERIA* Sm: in act: soc: linn: IX. p. 275. = Spr: syst: n. 3340. = *Hypni*, *Pterygophylli*, *Nekkeræ*, *Lesckæ*, *Chætophoræ*, *Anictangii* spec: nonnullæ quorund:

» *Seta* lateralis. *Peristom*: exter: dentibus 16. liberis, intern: membrana in dentes totidem ciliis interpositis abiens. *Calyptr*: mitræformis. »

*Obs*: Genus constans ex SPR: 32. stirpibus, quarum 1. tantum europæa.

\* 1. *H. lucens* = Sm: l. c. = Hook: et Tayl: musc: brit: p. 89. t. 27. = Spr: syst: IV. 196. Sub *Pterygophyllo* Brid: bryol: univ: II. p. 343. Sub *Hypno* L. sp: 1589. alique. Dill: musc: t. 24. f. 18. (*Eur*: fere tota, *Amer*: bor:, *C. B. S.*, *Australas*: *Pedem*:



locis paludosis AIL: add: n. 2482. In alpihus *Sessitis* BIROLI fl: acon: II. p. 162. omnes sub *Hypno*). Pro-cumbens simpliciuscula, folia imbricato-disticha erecta ovata integerrima enervia laxissime reticulata, capsula ovata sub-nutans operculo conico cuspidato, calyptra basi integra. Habeo ex *Gallia* et *Helvet*: non ex *Pedem*: Non extat in hb: BIROLI.

IX. TIMMIA Hedw: musc: I. p. 84. t. 31. = Brid: bryol: univ: II. p. 68. t. VI. f. 6. = Spr: syst: n. 3339. = *Mnii* et *Orthopyxidis* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Peristom*: exter: dentibus 16. la-  
 » tiusculis acuminatis, inter: membrana laciniis 16.  
 » dentibus oppositis irregulariter pertusis divisisque  
 » et anastomosantibus rarius una alterave divisione  
 » libera. *Calyptr*: dimidiata. »

*Obs*: Genus a *Bryo* distinctum structura præsertim peristomii interioris, constans 2. stirpibus europæis, quarum altera demum in *Amer*: septentr: et in ins: *Melville* etiam reperta.

\* 1. *T. megapolitana* = Hedw: l. c. = Spr: syst: IV. 195. = Brid: bryol: univ: II. p. 69. *T. polytrichoides* Brid: spec: II. p. 97. et Denot: mant: n. 12. (*Eur*: med: et septentr: , *Amer*: bor: , ins: *Melville*. *Pedem*: in alpihus *Penninis* abundans DENOT: l. c. Habeo etiam ex *Sabaud*: à la *Chambre* a PERRET. *Sardin*: in umbrosis montanis MORIS st: sard: III. p. 16.). Erecta sub-ramosa, folia longissima lineari-lanceolata serrata patenti-reflexa siccitate cincinnata, capsula ovata nutans sub-apophysata operculo convexo-

foveolato, peristomium inter: lutescens. Ab hac differt *T. austriaca*, quam etiam possideo ex *Helvet.*; foliis basi *lterioribus*, seta *longiore*, operculo *papillato*, peristomio inter: *albo*.

## Trib: III.

HYPNOIDEÆ (Arn: disp: meth: p. 296. =  
Bals: et Denot: prodr: p. 52.).

X. DALTONIA Hook: et Tayl: musc: brit: t. 3. = Spr: syst: n. 3328. in parte = *Cryphæa* et *Daltonia* Brid: bryol: univ: II. p. 249. t. IX. f. 10. 12. = *Neckera*, *Sphagni*, *Fontinalis*, *Hypni*, *Pilotrichi*, *Grimmiæ*, *Hawsoniæ* spec: nonnullæ quorund: (Inter *Pleurocarpos peristomos* Brid:).

» Seta lateralis. Peristom: exter: dentibus 16. sub-linearibus (in *Cryphæa*) vel latiusculis (in *Daltonia*) erectis; inter: ciliis totidem basi liberis filiformibus cum dentibus alternantibus. Calyptr: mitriformis conica basi sub-integra (in *Cryphæa*) vel fimbriata (in *Daltonia*). Capsula æqualis annulata (in *Cryphæa*) vel exannulata (in *Daltonia*). »

Obs: Memorata BRID: genera in unum conjunximus ne nimium affinitates disrumpantur; spec: ex SPR: 6., quarum 1. tantum europæa.

\* 1. *D. heteromalla* = Hook: et Tayl: l. c. p. 139. t. 22. = Spr: syst: IV. 187. = Sub *Neckera* Hedw: Sub *Cryphæa* Brid: Sub *Hypno* Gmel: *Sphagnum arboreum* L. sp: 1570. alique. Dill: musc: t. 32. f. 6. (Eur: passim, Pensylv: Pedem: non infrequens supra

truncos arborum ALL: n. 2429. sub *Sphagno arboreo*.  
 Supra arbores et saxa RE fl: segus: p. 85. sub eod:  
 et fl: tor: II. p. 203. sub *Neckera*. BIROLI fl: acon: II.  
 p. 154. sub *Sph: arboreo*). Decumbens ramosa, folia  
 sub-imbricata ovato-acuminata concava nervo infra  
 apicem evanido, capsula oblonga heteromalla sub-  
 sessilis perichætio longissimo immersa operculo conico  
 acuminato. » Ex *Italia* super: huc usque non vidi-  
 » mus, veremur citatos Auctores Pedemontanos hanc  
 » commutavisse cum *Anictangio ciliato* vel *Orthotri-*  
 » *cho affine* vel *striato*. » DENOT:

XI. ANOMODON Hook: et Tayl: musc: brit: p. 137. t. 3.  
 = Spr: syst: n. 3327. = *Antstrichiæ* et *Neckerae*  
 spec: Brid: bryol: univ: II. p. 222. 226. t. IX. f.  
 7. 9. = *Hypni* spec: L. (Inter *Pleurocarpos peri-*  
*stomos* Brid: ).

» *Seta* lateralis. *Peristom*: exter: dentibus 16., inter:  
 » ciliis totidem rectis e latere dentium procedentibus.  
 » *Calyptr*: dimidiata. »

*Obs*: Genus constans 2-3. stirpibus europæis.

\* 1. *A. viticulosum* = Hook: et Tayl: l. c. p. 138.  
 t. 22. = Spr: syst: IV. 187. = Bals: et Denot: prodr:  
 p. 54. Sub *Neckera* Brid: l. c. p. 231. ex Hedw: alii-  
 que. Sub *Hypno* L. sp: 1592. alii que. Dill: musc: t. 39.  
 f. 43. (*Eur*: passim. *Pedem*: ad caudices arborum in  
 sylvis ALL: n. 2495. sub *Hypno*. RE fl: tor: II. p. 203.  
 sub *Neckera*. BIROLI fl: acon: II. p. 163. sub *Hypno*.  
 lisdem locis c *Sabaud*: a PERRET). Repens ramis ere-  
 ctis simplicibus 2-fidisve, folia opaca lucide viridia  
 patentia ovato-lanceolata obtusa integra nervo excur-



rente, setæ tortiles in parte superiore ramorum nascentes dilute purpureæ, capsula cylindracea badia sub-erecta operculo conico acuminato.

\* 2. *A. curtispiculum* = Hook: et Tayl: l. c. p. 137. t. 22. = Spr: syst: IV. 186. = Sub *Antitrichia* Brid: l. c. p. 222. Sub *Neckera* Hedw: aliique. Sub *Hypno* L. sp: 1594. aliique. Dill: musc: t. 43. f. 69. (*Eur*: passim. *Pedem*: incolit montanas sylvas ALL: n. 2499. sub *Hypno*. *Sardin*: ad arbores saxaque in sylvis MORIS st: sard: III. p. 12. sub *Antitrichia*. Habeo ex iisdem locis in *Sabaud*: a PERRET). Priori valde affine, sed differt caulibus parce ramosis, ramis subpinnatis, foliis apice denticulatis nervo evanescente perichætialibus caulinis angustioribus, seta breviori, capsula ovato-oblonga.

\* 3. *A. repens* = Hüben: musc: germ: p. 558. et Denot: mant: n. 36. = Sub *Pterogonio* Schwægr: suppl: 1. 1. p. 100. t. 27. = Sub *Pterigynandro* Brid: bryol: univ: II. p. 183. Sub *Maschalocarpo* Spr: syst: IV. 159. (*Eur*:, *Amer*: bor: *Pedem*: ad truncos arborum in sylvis collinis provinc: *Novar*: DENOT: l. c.). Stirps pro genere admodum dubia et fide DENOT: huc relata, depressa repens ramosa ramis confertis erectis sub-simplicibus, folia dense imbricata ovato-lanceolata sub-enervia, capsula erecta operculo conico obliquo.

XII. *NECKERA* Hook: et Tayl: musc: brit: p. 134. t. 3.  
 = *Neckera*, *Fontinalis*, *Polytrichi*, *Leskeæ*, *Hypni*,  
*Trachylomæ*, *Hookeriæ*, *Anictangii* spec: nonnullæ  
 quorund: (Inter *Pleurocarpos peristomos* Brid: bryol:  
 univ: II. p. 226.).

» *Seta* terminalis. *Peristom*: exter: dentibus 16.,  
 » inter: ciliis totidem basi membrana brevi connexis.  
 » *Calyptra* dimidiata. »

*Obs*: Genus constans 30. circiter stirpibus, inter  
 quas 4. tantum europææ.

\* 1. *N. pennata* = Hedw: musc: III. p. 47. t. 19.  
 = Spr: syst: IV. 184. = *N. distichia pinnata* Brid:  
 bryol: univ: II. p. 238. Sub *Polytricho* P. de Beauv:  
 Sub *Fontinali* L. sp: 1371. alii que. Dill: musc: t. 32.  
 f. 9. (Ad arbores *Eur*: , *Amer*: bor: , *Afr*: austr: *Pe-*  
*dem*: ad quercus locis montanis ALL: n. 2513. sub  
*Fontinali*). Decumbens pinnatim ramosa, folia bifaria  
 plana ovato-acuminata integra enervia pallide nitentia,  
 capsula oblonga foliis perichætialibus immersa oper-  
 culo breviter et oblique rostrato.

\* 2. *N. crispa* = Hedw: sp: p. 70. = Hook: et  
 Tayl: musc: brit: p. 136. t. 22. = Spr: syst: IV. 185.  
 Bals: et Denot: prodr: p. 54. *N. distichia crispa* Brid:  
 bryol: univ: II. p. 246. Sub *Hypno* L. sp: 1589. alii-  
 que. Dill: musc: t. 36. f. 12. (*Eur*: , *Amer*: bor: *Pe-*  
*dem*: vulgaris in subalpinis sylvis et in corticibus ar-  
 borum ALL: n. 2484. sub *Hypno*. In circumdariis  
*Eumeriæ* BIROLI fl: acon: II. p. 162. sub eod: Habeo  
 e *Sabaud*: a PERRET. *Sardin*: ad saxa madida trun-  
 cosque arborum MORIS st: sard: III. p. 13.). Differt

a priori præsertim foliis *rugulosis* apice *denticulatis* nervo tenui brevi instructis, seta *exserta* elongata, capsula *ovata*.

XIII. FONTINALIS Hedw: furid: musc: II. p. 97. t. 9. = Spr: syst: n. 3330. = Lam: ill: t. 873. = *Fontinalis* spec: quamplurimæ L. (Inter *Pleurocarpos peristomos* Brid: bryol: univ: II. p. 654. t. X. f. 9.).

» Seta lateralis. Peristom: exter: dentibus 16., in-  
» ter: ciliis totidem connexis in membranam conum  
» reticulatum efficientem. Calyptra mitræformis. »

Obs: Genus structura peristomii interioris distinctissimum, constans 4-5. stirpibus ex *Eur:* et *Amer:* bor:

\* 1. *F. antipyretica* = L. sp: 1571. = Spr: syst: IV. 187. = Hook: et Tayl: musc: brit: p. 140. t. 22. Bals: et Denot: prodr: p. 56. Dill: musc: t. 33. f. 1. (In aquis *Eur:* et *Amer:* bor: *Pedem:* in aquis frigidis et lente inter saxa fluentibus ALL: n. 2511. RE fl: segus: p. 85. et fl: tor: II. p. 210. BIROLI fl: acon: II. p. 155. Habeo ex *Sabaud:* a PERRET. *Sardin:* in aquis fluentibus MORIS st: sard: III. p. 14.). Pedalis et ultra ramosissima fluitans, folia trifaria erecto-patentia late ovata complicato-carinata enervia integra perichætialia obtusa setam brevem capsulamque obovatam recondentia. Variat statura minori ( $\beta$  *minor* BRID: non *F. minor* L.) præsertim in rivulis montanis, et tunc æmulat *F. squamosam* L. sp: 1571. quam etiam possideo ex *Gallia* non ex *Pedem:*, quæque differt speciatim statura minori et graciliori, foliisque

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sparsis lanceolato-subulatis. An huc referendum *Hypnum squamulosum* enumeratum a BALB: el: p. 5.? Plantam non vidi.

XIV. LESKEA Hedw: fund: musc: II. p. 93. t. 10. f. 62. 65.

= Spr: syst: n. 3333. = *Leskia* Brid: bryol: univ: II. p. 283. t. X. f. 3. = *Hypni* spec: plures, *Pilaisiæ*, *Hookeriæ*, *Spiridentis* spec: nonnullæ quorund: (Inter *Pleurocarpos peristomos* Brid:).

» *Seta* lateralis. *Peristom*: exter: dentibus 16., inter: membrana reticulata abiens in totidem cilia seu » processus pyramidatos linearesve uniformes. *Calyptr*: » dimidiata. »

*Obs*: Genus parum naturale habitu vario, in dispendium *Hypni* præcipue creatum, nunc constans 40. circiter stirpibus, inter quas 12-13. europææ.

\* 1. *L. complanata* = Hedw: l. c. = Spr: syst: IV. 189. *L. Omalia complanata* Brid: bryol: univ: II. p. 327. Sub *Hypno* L. sp: 1588. = Hook: et Tayl: musc: brit: p. 132. t. 24. aliique. Dill: musc: t. 34. f. 7. (Ad arborum truncos *Eur.*, *Guyanæ* et *Australas*: *Pedem*: in corticibus vetustarum arborum frequentissima ALL: n. 2481. sub *Hypno*. BIROLI fl: acon: II. p. 161. sub eod:). Procumbens pinnatim ramosa, folia imbricato - disticha oblonga apiculata integra enervia pallide viridia perichætialia acuminata vaginantia, capsula ovata erecta operculo oblique rostrato.

\* 2. *L. trichomanoides* = Hedw: sp: 232. = Spr: syst: IV. 189. *L. Omatia trichomanoides* Brid: bryol: univ: II. p. 329. Sub *Hypno* Schreb: spicil: fl: lips: p. 88. = Hook: et Tayl: musc: brit: p. 152. t. 24.

Bals: et Denot: prodr: p. 57. aliique. Dill: musc: t. 34. f. 8. (*Eur: cum priori. In collibus Taurinens: RE fl: tor: II. p. 205. BALE: el: p. 6. Habeo ex Pedem: sylvis a DENOT: et ex Sabaud: a PERRET*). A præcedenti dignoscitur statura *minori*, ramis *curvatis*, foliis *deflexis obtusis apice denticulatis*, nervo ad medium evanido instructis. *H. complanatum* ALL: forte et hanc quoque comprehendit speciem.

\* 3. *L. rufescens* = Schwægr: suppl: 1. 2. p. 178. t. 86. = Spr: syst: IV. 190. = Brid: bryol: univ: II. p. 284. Sub *Hypno* Dicks: Bals: et Denot: prodr: p. 69. aliique (*German: austr:, Helvet:, Eur: bor:, Galia. Pedem: BALE: el: p. 5. sub Hypno. Ex alpi: prov: Novariens: habeo a DENOT:*). Erecta vel adscendens parce ramosa, folia dense imbricata erecto - patentia sub-disticha lanceolata acuminata striata integra nervis 2. brevibus obsoletis e viridi vel aureo rufescentia, capsula oblonga erectiuscula operculo conico acuminato incurvo. Raro fructificat.

\* 4. *L. dendroides* = Hedw: sp: p. 228. = Sub *Climacio* Schwægr: suppl: 1. 2. p. 141. t. 81. = Spr: syst: IV. 194. Brid: bryol: univ: II. p. 271. Sub *Hypno* L. sp: 1593. Bals: et Denot: prodr: p. 61. aliique. Dill: musc: t. 40. f. 48. (*Eur:, Amer: bor: Pedem: in sylvis abunde ALL: n. 2498. sub Hypno. RE fl: segus: p. 87. sub eod: In sylvis della Mandria atque etiam in collibus RE fl: tor: II. p. 204. sub Climacio. Ad sepes in collibus vulgaris BIROLI fl: acon: II. p. 163. sub Hypno*). Erecta inferne nuda superne fastigiato-ramosa, folia ut in priori sed obtuse serrata luteo - viridia nervo ante apicem desinente, capsula

ovato - oblonga erecta peristomii inter: laciniis late pertusis.

\* 5. *L. sericea* = Hedw: musc: IV. p. 43. t. 17. = Brid: bryol: univ: II. p. 295. = Spr: syst: IV. 191. Sub *Hypno* L. sp: 1595. Bals: et Denot: prodr: p. 70. aliique. Dill: musc: t. 42. f. 59. (In toto orbe terrarum ad arbores terram et saxa. *Pedem*: passim in arborum corticibus inter saxa imo etiam ad muros provenit ALL: n. 2505. sub *Hypno*. Frequens in pascuis RE fl: segus: p. 87. sub cod: et fl: tor: II. p. 205. sub *Leskia*. Ad arborum truncos vulgaris BIROLI fl: acon: II. p. 164. sub *Hypno*. *Sardin*: ad truncos arborum et ad rupes vulgarissima MORIS st: sard: III. p. 15. Habeo etiam ex *Sabaud*: a PERRET). Repens ramis confertis, folia arcte imbricata lanceolata acuminata striata sub - denticulata evanidi - nervia lutescenti-viridia nitentia, seta scabra purpurea tortilis, capsula ovato-oblonga erecta operculo conico.

\* 6. *L. polyantha* = Hedw: musc: IV. p. 5. t. 2. = Brid: bryol: univ: II. p. 311. excl: syn: Dill: = Spr: syst: IV. 190. Sub *Hypno* Schreb: spicil: fl: lips: p. 97. non Smith. Hook: et Tayl: musc: brit: p. 164. suppl: 4. t. 5. Bals: et Denot: prodr: p. 109. aliique (*Eur*: passim, *Amer*: bor:, ins: *Borbon*: *Pedem*: BALB: el: p. 6. In nemoribus vineæ *Morozzo* RE fl: tor: II. p. 205. Ad arborum truncos frequens ex DENOT:). Repens dense ramosa ramis erectis raro curvatis, folia imbricata sub-erecta sub-secunda ovato-lanceolata acuminata concava obscure versus apicem denticulata enervia vel obsolete 2 - nervia læte sericeo - viridia, capsula ovato-oblonga operculo conico attenuato ob-



tusiusculo leniter curvo. Forma, mole, ramificatione, colore valde ludit.

\* 7. *L. subtilis* = Hedw: musc: IV. p. 23. t. 9: = Brid: bryol: univ: II. p. 309. = Spr: syst: IV. 190. Sub *Hypno* Hoffm: deutsch: fl: II. p. 70. non Brid: nec Diks: nec Smith. Bals: et Denot: prodr: p. 65. (*Eur: passim. Pedem: ad truncos arborum in sylvis montanis ex DENOT:.*) Pumila tenuissime cæspitosa ramis implexis filiformibus, folia laxiuscula sericea integra enervia, capsula oblonga cylindrica erecta, operculum conicum acutum. « Ab *Hypno serpente*, » *tenello*, minoribusque facie haud absimilibus, cap- » sula erecta, characteribus genericis etiam neglectis, » facile distinguitur. » DENOT: mss:

\* 8. *L. attenuata* = Hedw: musc: I. p. 33. t. 12. = Brid: bryol: univ: II. p. 317. = Spr: syst: IV. 189. Sub *Hypno* Schreb: spicil: fl: lips: p. 100. non Diks: Bals: et Denot: prodr: p. 96. alique. *H. clavatum* Bellard: app: p. 51. non Spr: (*Eur: passim, Amer: bor: Pedem: ad truncos arborum et ad terram in umbrosis vulgaris DENOT: mant: n. 14. Sabaud: locis humidiusculis secus viam a Moutiers ad Pralugnan BELLARD: l. c.*). Cæspitosa ramosa ramis sub-incurvis attenuatis vel apice incrassatis, folia imbricata secunda ovato-lanceolata obtusiuscula denticulata triste viridia opaca nervo versus apicem abrupto, capsula oblongo-cylindrica operculo conico acuto.

\* 9. *L. polycarpa* = Ehrh: crypt: exsic: n. 96. = Brid: bryol: univ: II. p. 314. Spr: syst: IV. 191. = *Hypnum medium* Hook: et Tayl: musc: brit: p. 154. t. 24. Bals: et Denot: prodr: p. 97. alique. Dill: musc:

t. 42. f. 65. (*Eur:*, *Amer:* bor: potissimum ad Tiliarum truncos. *Pedem:* ad pedes arborum in pratis præsertim circa urbem *Novariæ* *DENOT:* mant: n. 13.). Repens ramosa flaccida ramis incurvis erectisve simplicibus vel pinnatim ramulosis, folia imbricata ovata obtusiuscula integra sub-recurva luride viridia nervo apicem sub - attingente, setæ elongatæ numerosæ tamen semper in eodem perichætio solitariæ, capsula cylindrica erectiuscula operculo conico brevi. A præcedenti caule *repente* setisque *numerosis* prima facie distinguitur.

\* 10. *L. paludosa* = Hedw: musc: IV. p. 2. t. 1. = Brid: bryol: univ: II. p. 315. excl: syn: Smith, Diks: et Dill: = Spr: syst: IV. 191. excl: syn: ? Sub *Hypno* Arn: disp: meth: p. 67. Bals: et Denot: prodr: p. 97. *H. palustre* Hoffm: non L. (*Eur:* ad arborum truncos. *Pedem:* ad truncos arborum circa *Taurin:* habeo ex *DENOT:* lectam a D. COMBA). A priori diversa statura paullo minori, ramis erectiusculis paucioribus, foliis acutiusculis tenuioribus evanidi-nerviis, setis parcioribus, capsulis curvulis.

\* 11. *L. incurvata* = Hedw: sp: p. 216. t. 53. = Brid: bryol: univ: II. p. 320. = Spr: syst: IV. 189. *Hypnum filamentosum* Diks:, Bals: et Denot: prodr: p. 98. aliiq. *H. atrovirens* Diks: aliiq. *H. attenuatum* Diks: non Schreb: (In montanis et alpibus totius *Eur:* *Pedem:* ex truncis arborum in sylvis montanis habeo a *DENOT:*). Procumbens rigida vage ramosa ramis simplicibus erectis vel incurvis obtusis attenuatisve, folia imbricata sub-secunda ovato-lanceolata acuminata obsolete denticulata basi 2-striata

intense viridia opaca nervo ante apicem desinente, capsula ovata cernua operculo conico. Plurimum ludit colore foliorum, forma et longitudine ramorum. Non confundenda cum *Hypno incurvato* BRID: de quo infra.

XV. HYPNUM Lin: syst: ed: Murr: n. 1195. excl: nonnul: stirpib: = Hook: et Tayl: musc: brit: p. 151. t. 3. = Brid: bryol: univ: II. p. 388. t. X. f. 8. = Spr: syst: n. 3341. = Lam: ill: t. 874. = *Leskeæ*, *Climacii*, *Pterigynandri*, *Grimmiæ*, *Hookeriæ* spec: nonnullæ quorund: (Inter *Pleurocarpos peristomos* Brid:).

» *Seta* lateralis. *Peristom*: exterius dentibus 16.,  
 » inter: membrana tenuis in 16. segmenta integra aut  
 » perforata divisa, ciliolis interjectis. *Calyptra* di-  
 » midiata. »

*Obs*: Genus habitu summopere vario, inter omnes *Bryaceas* ditissimum (stirpes 180. circiter ex BRID:, 130. ex SPR:, omissis illis quarum fructus ignoti), et ideo opportune in varias sectiones divisum.

### Sect: I.

*Complanata* Arn: disp: meth: p. 306.  
 (Surculi plani, folia recta, capsula erecta vel cernua).

\* 1. *H. undulatum* = L. sp: 1589. = Hook: et Tayl: musc: brit: p. 153. t. 24. = Brid: bryol: univ: II. p. 396. Spr: syst: IV. 200. Dill: musc: t. 36. f. 11. (*Eur*: passim. *Pedem*: locis opacis collium et montium et in subalpinis sylvis alpium maritimarum fre-



quens ALL: n. 2483. RE fl: segus: p. 86. In umbrosis inter *Superga* et *S. Mauro* RE fl: tor: II. p. 206. In montium saxosis præ ceteris *d'Intra* BIROLI fl: acon: II. p. 162.). Procumbens vage ramosum, folia imbricatio-disticha ovata acuta transverse undulata sub-2-nervia integerrima, capsula sub-cylindrica cernua operculo e basi convexiore brevi-rostro.

\* 2. *H. denticulatum* = L. sp: 1588. = Hook: et Tayl: muse: brit: p. 153. t. 24. = Spr: syst: IV. 200. Bals: et Denot: prodr: p. 59. *H. Stereodon denticulatus* Brid: bryol: univ: p. 551. Dill: muse: t. 34. f. 5. (*Eur*: fere tota, *Amer*: bor:, ins: *Terra-nova*. *Pedem*: ad vias in umbrosis montanis terræ innascitur ALL: n. 2478. Ad arborum radices RE fl: segus: p. 86. et fl: tor: II. p. 206. In collibus præsertim *di Prato* et *Romagnano* supra terram locis udis BIROLI fl: acon: II. p. 161.). Decumbens sub-simplex, folia simpliciter disticha ovato-lanceolata integra basi breviter 2-nervia nec enervia uti male in phrasi SPR:, capsula oblongo-cylindrica sub-cernua operculo conico brevi-rostro. Variat modis indicatis a cl: BRID: l. c. p. 553.

\* 3. *H. riparium* = L. sp: 1595. = Hook: et Tayl: muse: brit: p. 152. t. 24. = Brid: bryol: univ: II. p. 412. Spr: syst: IV. 200. Bals: et Denot: prodr: p. 60. Dill: muse: t. 40. f. 44. B C D (Ad fluvios et in inundatis *Eur*: fere totius, *Amer*: bor:, ins: *Terra-nova*. *Pedem*: secus fluvios et fluentes aquas ALL: addend: n. 2500.\* Secus aquæductus præsertim in oryxis BIROLI fl: acon: II. p. 164. Commune prope *Eporediam* ex DENOT: *Sardin*: juxta rivulos in montanis frequens MORIS st: sard: III. p. 15.). Procumbens

inordinate ramosum vel sub-pinnatum, folia laxa patentia disticha ovato-lanceolata integra nervo supra medium evanido, capsula oblongo-cylindracea cernua operculo conico mucronulato. Stirps valde ludibunda pro loci natalis conditione.

Sect. II.

*Myura* Arn: disp: meth: p. 312.

(Surculi teretiusculi varie ramosi, folia ovato-lanceolata vel lanceolata serrata, capsula erecta vel cernua).

\* 4. *H. Alopecurum* = L. sp: 1594. = Hook: et Tayl: musc: brit: p. 168. t. 25. = Brid: bryol: univ: II. p. 444. Spr: syst: IV. 205. Bals: et Denot: prodr: p. 62. Dill: musc: t. 41. f. 49. (*Eur.*, *Amer.* bor:, *Japon*: *Pedem*: in sylvis collium *Taurinens*: BELLARD: app: p. 51. Habeo ex collibus ad lacum *Cusii* prov: *Novariens*: a DENOT: *Sardin*: ad rupes madidas et juxta rivulos in montibus MORIS st: sard: III. p. 15.). Erectum inferne simplex superne fastigiato-ramosum, folia caulina remota late ovata acuminata integra ramea imbricata ovato-oblonga serrata nervo sub apice evanescente, capsula ovata cernua operculo conico rostrato. « Specimina fructifera ex *Italia* superiori hucusque non vidimus. » DENOT:

\* 5. *H. Myurum* = Pollich: palat: III. p. 170. f. 8. = Bals: et Denot: prodr: p. 76. = *H. curvatum* Sw: musc: suec: p. 64. Hook: et Tayl: musc: brit: p. 169. t. 24. Spr: syst: IV. 206. *H. myosuroides* Hedw: stirp: IV. p. 20. t. 8. non L. *Isothecium Myurum*

Brid: bryol: univ: II. p. 367. Dill: musc: t. 41. f. 50. (In saxis et arboribus rarius ad terram per totam *Eur.*, in *Afr.*, *Amer.* bor:, ins: *Terra-nova*, *Jamaica* confertim habitat. *Pedem:* ad arborum cortices ALL: n. 2507. Habeo ex sylvis montanis provinc: *Novar:* a DENOT: E *Sabaud:* au *Biolay-sur-Aix* a PERRET. *Sardin:* in sylvis ad arbores frequens MORIS st: sard: III. p. 15. sub *Isothecio*). Sub-repens vel erectiusculum superne ramosum ramis incurvis, folia imbricata ovato-elliptica sub-serrata nervo supra medium evanido, capsula ovata erecta operculo conico incurvo.

\* 6. *H. myosuroides* = L. sp: 1596. non Hedw: = Hook: et Tayl: musc: brit: p. 169. t. 25. = Spr: syst: IV. 208. Sub *Isothecio* Brid: bryol: univ: II. p. 369. Dill: musc: t. 41. f. 51. (*Eur.*, *Amer.* bor: *Pedem:* ad arborum cortices ALL: n. 2508. BIROLI fl: acon: II. p. 164.?). Differt a priori, cui valde affine, statura *graciliori*, foliis caulinis *squamosis* rameis *longe acuminatis* evidentius *serratis ruptinerviis*, capsula *inclinata*, operculo *sub-erecto*. Fide cl: ALL: refero hanc stirpem pro indigena. In hb: BIROLI pro hac invenitur *Bartramia fontana*. *H. myosuroides* HEDW: pertinet ad præcedentem.

7. *H. strigosum* = Hoffm: deutsch: fl: II. p. 76. = Spr: syst: IV. 207. (*Eur:* *Sardin:* in umbrosis sylvestribus *Iglesias* MORIS st: sard: III. p. 15.). Monente cl: DENOT: in mss: planta sardoa nonnihil differt a stirpe ab ipso descripta in prodr: p. 80., præsertim caule *repente* nec *ascendente*, foliis *cordato-ovatis* nec *ovato-triquetris* apicem versus tantummodo *serrulatis*.

\* 8. *H. stramineum* = Dicks: pl: crypt: fasc: II.



p. 6. t. 1. f. 9. = Hook: et Tayl: musc: brit: p. 160. t. 24. = Spr: syst: IV. 206. *H. Stereodon stramineus* Brid: bryol: univ: II. p. 568. (*Eur: bor: et med: , Amer: bor: , ins: Terra-nova. Pedem: in pascuis irrigatis alpium provinc: Novar: Denot: mant: n. 15.*). Erectum filiforme ramosiusculum, folia sub-imbricata adpresso-patula oblongo-ovata obtusa integerrima nervo sub-continuo, capsula sub-cylindrica arcuato-cernua operculo conico-acuminato.

## Sect: III.

*Illecebra* Arn: disp: meth: p. 307.

(Surculi teretiusculi varie ramosi, folia recta imbricata ovata vel elliptica obtusa vel apiculata valde concava).

\* 9. *H. purum* = L. sp: 1594. = Hook: et Tayl: musc: brit: p. 162. t. 24. = Brid: bryol: univ: II. p. 425. Spr: syst: IV. 206. Bals: et Denot: prodr: p. 63. Dill: musc: t. 40. f. 45. (*Eur: passim, Amer: bor: Pedem: in sylvis sub-humidis ALL: n. 2501. BIROLI fl: acon: II. p. 164. Habeo ex Sabaud: a PERRET. Sardin: ad rupes et in pascuis umbrosis MORIS st: sard: III. p. 15.*). Decumbens vel adscendens sub-pinnatim ramosum, folia adpressa elliptico-apiculata apice sub-denticulata nervo supra medium evanido, seta purpurea lævis flexuosa, capsula ovata cernua operculo conico mucronulato.

\* 10. *H. Schreberi* = W. prodr: fl: berol: p. 325. = Hook: et Tayl: musc: brit: p. 159. t. 24. = Brid:

bryol: univ: II. p. 420. Spr: syst: IV. 209. Bals: et Denot: prodr: p. 64. *H. compressum* Schreb: Dill: musc: t. 40. f. 47. (*Eur: , Asia min: , Amer: bor: Pedem:* passim cum priori cum quo forsan confusum a Nostratibus. Speciatim ex montibus et sylvis *Nova-riens:* a DENOT: mant: n. 16.). A priori distinguitur caule ramisque compressiusculis attenuatis, foliis breviter 3-nerviis viridi-splendentibus marginibus apicem versus incurvis.

\* 11. *H. murale* = Hedw: musc: IV. p. 79. t. 30. = Hook: et Tayl: musc: brit: p. 161. t. 24. = Spr: syst: IV. 206. Bals: et Denot: prodr: p. 64. *H. Stereodon muralis* Brid: bryol: univ: II. p. 586. *H. abbreviatum* Hedw: spec: *H. confertum* Sm: Dill: musc: t. 41. f. 52. (*Eur: temperata et calida ad muros præsertim. Pedem:* ad rupes in montibus provinc: *Nova-riens:*, in impulviis R. Archigymnasii *Taurin:* vulgatissimum DENOT: mant: n. 17.). Repens implexe ramosum ramis filiformibus simplicibus obtusiusculis, folia late ovata apiculata integra triste viridia nervo supra medium desinente, capsula ovata cernua seta longissima purpurea suffulta operculo e basi conica rostrato subulato capsulam sub-æquante. « Varietas » lecta in impulviis Archigymnasii *Taurin:* recedit a » specie habitu longe laxiore, ramis brevibus, foliis » laxis, capsula oblonga curvato-cernua. » DENOT:

\* 12. *H. concinnum* = Denot: mant: n. 18. (*Pedem:* in apricis collinis et pascuis aridis DENOT: l. c.). » Ab omnibus *H. cupressiformis* varr: differt foliis » æqualiter imbricatis obtusis, a *cuspidato* pro quo » diu habuimus, foliis oblongo-ellipticis obsitis ra-

» misque minime cuspidatis, habituque ab omnibus  
» longe diverso. » DENOT:

\* 13. *H. moniliforme* = Wahlemb: fl: lapp: p. 376.  
= Hook: et Tayl: musc: brit: p. 159. t. 24. = Spr:  
syst: IV. 209. *Isothecium julaceum* Brid: bryol: univ:  
II. p. 365. (*Lappon:*, *Eur:* med: *Pedem:* in sylvis  
montanis prov: *Novar:* et in alpebus *Penninis* DENOT:  
mant: n. 19.). Adscendens sub-ramosum ramis sim-  
plicibus teretibus, folia dense imbricata sub-rotunda  
concava enervia perichætialia striata, capsula sub-ere-  
cta operculo oblique conico.

\* 14. *H. illecebrum* = L. sp: 1594. = Brid: bryol:  
univ: II. p. 428. = Spr: syst: IV. 209. Dill: musc:  
t. 40. f. 46. (*Eur:* med: et austr: *Pedem:* in sylvis  
ALL: n. 2500. Ad terram in pascuis aridis dumosis  
DENOT: mant: n. 20.). Procumbens divisum vage sub-  
pinnatimque ramosum ramis teretibus sub-incurvis,  
folia arcte adpressa ovata concava serrulata nervo ul-  
tra medium sub-continuo, seta scaberrima, capsula  
ovato-ventricosa cernua operculo conico acuminato.

#### Sect: IV.

*Serpentia* Arn: disp: meth: p. 319.

{ Surculi teretiusculi, folia recta ovato-acuminata  
sub-integerrima extriata, capsula cernua).

\* 15. *H. serpens* = L. sp: 1596. = Hook: et Tayl:  
musc: brit: p. 155. t. 24. = Spr: syst: IV. 207. Bals:  
et Denot: prodr: p. 68. *H. Stereodon serpens* Brid:  
bryol: univ: II. p. 642. Dill: musc: t. 42. f. 64. (*Eur:*,



*Asia min:*, *Amer:* bor: *Pedem:* ubique ad truncos arborum et muros etsi a solo BALB: el: p. 5. enumeratum). Repens confertim ramosum ramis sub-simplicibus erectis vel decumbentibus, folia laxiuscula apice obtusiuscula integra nervo apicem plerumque attingente, capsula oblongo-cylindrica arcuata operculo conico brevi-mucronulato. « Ludit tenuitate et » longitudine ramorum qui nonnumquam præsertim » in antris confervam æmulant. » DENOT: Circa var: cons: BRID: l. c. Habeo ex *Sabaud:* e *Villard-leger* a PERRET var: setis capsulisque pulchre aurantiacis (*H. aurantiacum* quorund: Var: » BRID: l. c. p. 646.).

16. *H. tenellum* = Dicks: pl: crypt: brit: IV. p. 16. t. 11. f. 12. = Spr: syst: IV. 207. = *H. algerinum* Desf: fl: atl: II. t. 258. f. 2. optima (*Eur:* merid:, *Ital:*, *Afr:* bor: *Sardin:* in umbrosis viarum et in antris MORIS st: sard: III. p. 15. sub *H. algeriano*). Vix a priori diversum foliis fasciculatis lanceolato-subulatis, capsula ovata, operculo rostrato.

\* 17. *H. pulchellum* = Dicks: pl: crypt: brit: II. p. 13. t. 5. f. 6. = Brid: bryol: univ: II. p. 454. = Spr: syst: IV. 202. Bals: et Denot: prodr: p. 106. (*Eur:* passim, *Asia* septentr:, *Amer:* bor: *Pedem:* ad rupes in montibus ad *Verbanum* DENOT: mant: n. 21. Habeo etiam ex sylvis umbrosis alpium *Sabaud:* a PERRET). Erectum tenue confertim ramosum, folia laxè imbricata erecto-patentia ramorum apicem versus secunda lanceolato-acuminata integra flavescentia enervia, capsula ovato-oblonga leniter curvato-inclinata operculo conico.

\* 18. *H. incurvatum* = Schrad: crypt: exsicc: n. 80.

≡ Schwægr: suppl: 1. 2. p. 285. t. 94. = Brid: bryol: univ: II. p. 451. Spr: syst: IV. 202. Bals: et Denot: prodr: p. 108. (*Eur: passim, Amer: bor: Pedem: BALB: el: p. 5. Habeo ex sylvis montanis alpium Pennin: a DENOT:* ). Differt a priori caule *repente*, ramis apice *curvatis*, foliis obsolete 2-nerviis, capsula *ovata cernua*, operculo breviter *acuminato*.

Sect: V.

*Rutabula* Arn: disp: meth: p. 312.

(*Surculi inordinate ramosi raro pinnati, folia ovato-lanceolata serrata, capsula cernua*).

α *Seta lævi.*

\* 19. *H. nitens* = Schreb: spicil: fl: lips: p. 92. = Hook: et Tayl: musc: brit: p. 167. t. 25. = Spr: syst: IV. 204. Bals: et Denot: prodr: p. 73. *H. Stereodon nitens* Brid: bryol: univ: II. p. 560. Dill: musc: t. 39. f. 37. (In paludibus *Eur: , Asiæ septentr: , Amer: bor: Pedem: in valle di Lanzo secus fluentes fontium aquas ALL: n. 2503.*). Adscendens ramis simplicibus compressiusculis, folia imbricata striata nervo ante apicem evanescente, capsula ovato-oblonga arcuata operculo conico. Huc pertinet *H. trichodes* POLL: pl: pal: n. 1047. sec: omnes Auctores; hic igitur unica spec: videtur comprehensa ab ALL: sub *H. nitente* et *H. trichode* n. 2504. eo magis quod idem synon: DILL: referat sub utraque.

\* 20. *H. salebrosum* = Hoffm: deutsch: fl: II. p. 74.

= Hook: et Tayl: musc: brit: p. 166. t. 5. = Brid: bryol: univ: II. p. 477. Spr: syst: IV. 207. Bals: et Denot: prodr: p. 71. (*Eur:*, *Amer:* bor: *Pedem:* in sylvis ad terram; habeo ex valle *Intrasca* a DENOT:). Repens vage pinnatimque ramosum ramis sub - simplicibus teretiusculis sub-erectis, folia imbricata longe acuminata striata margine sub - recurva nervo supra medium evanido, capsula ovata operculo conico attenuato mucronulato.

\* 21. *H. megapolitanum* = Web: et Mohr: bot: tasch: p. 326. = Brid: bryol: univ: II. p. 491. Spr: syst: IV. 207. excl: syn: = Ic: ? (*Eur:* med: et austr: *Pedem:* in sylvis collinis ad *Verbanum* DENOT: mant: n. 23. *Sardin:* in humidis arenosis MORIS st: sard: III. p. 15.). Differt a priori præsertim ramis filiformibus flexuosis, foliis sub - distichis cordato - ovatis margine planis, capsula oblonga arcuata, operculo e basi conica rostrato, rostro varie curvato. Conf: *H. confertum* BALS: et DENOT: prodr: p. 88.

\* 22. *H. striatum* = Schreb: spicil: fl: lips: p. 275. = Hook: et Tayl: musc: brit: p. 178. t. 26. = Spr: syst: IV. 208. Bals: et Denot: prodr: p. 87. *H. longirostrum* Brid: bryol: univ: II. p. 502. ex Ehrh: Dill: musc: t. 38. f. 30. B (*Eur:* temperata, *Asia* min:, *Afr:* *Pedem:* in collibus *Taurin:* speciatim in nemoribus vineæ *Morozzo* RE fl: tor: II. p. 208. et BALB: el: p. 5. sub *H. longirostro*. Ex montibus et sylvis provinc: *Novar:* habeo a DENOT: Ex sylvis montanis *Sabaud:* prope *Aix* a PERRET). Duobus præcedentibus valde affine, sed præsertim foliis *late cordatis* evidentius *striatis*, nervo *supra medium* desinente,



capsulis *ovato-oblongis*, operculo *longe rostrato* satis diversum.

\* 23. *H. rusciforme* = Weiss: crypt: gott: p. 225. = Brid: bryol: univ: II. p. 497. Bals: et Denot: prodr: p. 86. *H. ruscifolium* Spr: syst: IV. 208. ex Neck: = Hook: et Tayl: musc: brit: p. 177. t. 26. Dill: musc: t. 38. f. 31. (*Eur: et Afr: bor: ad rivulos et flumina. Pedem: ad palos parietesque aquæductuum vulgare. Versus Supergam ad vineam Negri* RE fl: tor: II. p. 208. BALB: el: p. 5. *Sardin: juxta rivulos montis Genargentu* MORIS st: sard: III. p. 15.). Procumbens vage ramosum inferne plerumque denudatum, folia ovata acuta concaviuscula nervo ante apicem desinente, capsula ovata operculo rostrato. « Ubi in aquis puris » fluentibusque crescit, ibi dimensiones maximas adi- » piscit ramosissimumque evadit sed plerumque ste- » rile. » DENOT:

*β Seta scabra.*

\* 24. *H. lutescens* = Huds: fl: angl: p. 421. = Hook: et Tayl: musc: brit: p. 166. t. 25. = Brid: bryol: univ: II. p. 465. Bals: et Denot: prodr: p. 71. Sub *Climachio* Spr: syst: IV. 194. ex Voit: Dill: musc: t. 42. f. 60. (*Eur: , Asia septentr: , Amer: bor: Pedem: BALB: el: p. 5. Speciatim in collibus Taurin: RE fl: tor: II. p. 208. In pascuis siccis circa urbem præcipue alla Cittadella vulgatissimum ex DENOT: Sardin: in sylvis et ad sepes MORIS st: sard: III. p. 15.*). Procumbens sub-pinnatim ramosissimum, folia dense con-

ferta erecto-patentia lanceolato-acuminata striata lutescentia nervo supra medium evanescente, capsula ovata operculo conico.

\* 25. *H. rutabulum* = L. sp: 1590. = Hook: et Tayl: musc: brit: p. 176. t. 26. = Brid: bryol: univ: II. p. 485. Spr: syst: IV. 208. Bals: et Denot: prodr: p. 81. Dill: musc: t. 38. f. 29. (*Eur*: fere tota, *Asia* min:, *Amer*: bor: *Pedem*: uberrimum in sylvis ALL: n. 2486. RE fl: segus: p. 86. *Sardin*: ad margines viarum in montanis et ad truncos arborum MORIS st: sard: III. p. 15.). Differt a priori ramis inordinatis erectiusculis, foliis late ovatis concaviusculis sæpius amæne viridibus, capsula rutilante, operculo acuminato; summopere variat. « Habemus var: insignem » lectam in collibus ad *Verbanum* quæ ab omnibus » aliis hujusce speciei versatilis lusibus recedit caule » erectiusculo rigido, ramis sub-teretibus capsulaque » sub-rotunda. » DENOT:

\* 26. *H. velutinum* = L. sp: 1590. = Hook: et Tayl: musc: brit: p. 177. t. 25. = Brid: bryol: univ: II. p. 457. Spr: syst: IV. 209. Bals: et Denot: prodr: p. 84. *H. intricatum* Schreb: spicil: fl: lips: p. 99. var: Dill: musc: t. 42. f. 61. pro *H. velutino* et f. 61. D pro *intricato* (*Eur*: fere tota, *Asia* occid:, *Afr*: et *Amer*: bor: *Pedem*: vulgare ad arborum radices ALL: n. 2506. RE fl: segus: p. 87. et fl: tor: II. p. 207. BIROLI fl: acon: II. p. 164. *H. intricatm* BALE: el: p. 5. Habeo lectum ad muros in valle *Vegezzo* a DENOT:). Repens confertim ramosum, folia imbricata ovato-lanceolata acuminata viridia nitidula nervo supra medium

desinente, capsula ovata maturitate fusca operculo conico attenuato obtusiusculo.

\* 27. *H. plumosum* = L. sp: 1592. non Hedw: = Hook: et Tayl: musc: brit: p. 162. t. 25. = Brid: bryol: univ: p. 475. excl: syn: Hedw: ? Bals: et Denot: prodr: p. 83. Dill: musc: t. 35. f. 16. ? (*Eur: fere tota, Amer: bor: Pedem: in humidis collium et montium humiliorum ad Verbanum* DENOT: mant: n. 23. Ad rupes montis *Greiss* unice et rara stirps BIROLI fl: acon: II. p. 163. ?) Commutatatum a SPR: syst: IV. 207. cum *H. salebroso* n. 20. cui reapse affine, sed hoc ob setam lævem ad aliam sectionem spectat. *H. plumosum* HEDW: videtur potius referendum ad *H. pseudo-plumosum* BRID: l. c. p. 472. Ceterum synonymia circa hanc stirpem valde confusa. Cll: BALS: et DENOT: l. c. p. 83. suspicati sunt, BIROLIUM sub nomine *H. plumosi* speciem longe alienam habuisse. In ejus hb: non extat.

\* 28. *H. piliferum* = Schreb: spicil: fl: lips: p. 91. = Hook: et Tayl: musc: brit: p. 175. t. 25. = Brid: bryol: univ: II. p. 489. SPR: syst: IV. 209. Bals: et Denot: prodr: p. 81. *H. Lamarkii* DC. fl: fr: n. 1378. sec: eosdem (*Eur: , Amer: bor: Pedem: in sylvis ad terram et ad margines rivulorum* BALB: el: p. 5.). Facile distinguitur ab affinibus præsertim foliis pallide sed amæne viridibus ex apice obtuso in apiculum tenuissimum abeuntia unde pilifera adparent, operculo e basi conica longe rostrato. Eximiam var: possideo a PERRET lectam in *Sabaud: a Villard - léger* super saxa argillo - calcarea, quæ gaudet foliis latioribus



nervo sub-decurrente præditis, ramis confertioribus compressiusculis.

\* 29. *H. populeum* = Hedw: sp: p. 273. t. 70. f. 1. 6. = Hook: et Tayl: musc: brit: p. 157. t. 24. = Brid: bryol: univ: II. p. 470. Spr: syst: IV. 205. Bals: et Denot: prodr: p. 85. *H. viride* DC. fl: fr: n. 1380. ex Dub: (*Eur: fere tota, Amer: bor: Pedem: in alpium Allobrogicarum paludosis* RE app: III. p. 18. Ad truncos arborum saxa rupes in collibus ad *Verbanum* ubique DENOT: mant: n. 24.). Repens pumilum pinnatim confertimque ramosum, folia imbricata lanceolato-acuminata margine sub-recurva viridi-flavescentia nervo apicem attingente, seta oculis nudis lævis sub lente muriculata, capsula ovata sub-erecta operculo conico acuto.

\* 30. *H. prælongum* = L. sp: 1591. = Hook: et Tayl: musc: brit: p. 172. t. 25. = Brid: bryol: univ: II. p. 399. Spr: syst: IV. 208. Bals: et Denot: prodr: p. 78. (*Eur: passim, Amer: bor: Pedem: ad arborum cortices* ALL: n. 2489. In pascuis sub-humidis umbrosis RE fl: segus: p. 87. et fl: tor: II. p. 207. BIROLI fl: acon: II. p. 163.). Procumbens vage pinnatim bipinnatimque ramosum, folia laxè imbricata ex cordato ovata acuminata triste viridia nervo ante apicem evanido, capsula ovata plus minus oblonga operculo e basi conica rostrato capsulam sub-æquante. Stirps polymorpha.

## Sect: VI.

*Tamariscina* Dub: bot: gall: p. 557. ex Arn: not: mss:  
(Surculi 2-3-pinnatim ramosi, folia cordata  
vel ovato-lanceolata, capsula cernua).

\* 31. *H. abietinum* = L. sp: 1591. = Hook: et  
Tayl: musc: brit: p. 174. t. 25. = Spr: syst: IV. 205.  
Bals: et Denot: prodr: p. 77. *H. Stereodon abietinus*  
Brid: bryol: univ: II. p. 573. Dill: musc: t. 35. f. 17.  
(Eur., Amer: bor: Sabaud: in sylvis inter *Bramant*  
et *Termignon*, et ubique in sylvis abietum ALL: n.  
2491. *Pedem*: vulgatissimum in pascuis apricis mon-  
tibus collibus et sylvis sed minime fructificans DENOT:  
mss:). Adscendens pinnatim ramosum rigidum pinnis  
approximatis attenuato-subulatis patentibus, folia im-  
bricata cordato-ovata margine reflexa serrulata dorso  
papillosa nervo ante apicem evanescente, seta lævis,  
capsula cylindracea operculo conico.

\* 32. *H. proliferum* = L. sp: 1590. = Hook: et  
Tayl: musc: brit: p. 170. t. 25. = Spr: syst: IV. 205.  
*H. tamariscinum* Brid: bryol: univ: II. p. 438. Bals:  
et Denot: prodr: p. 75. alique. Dill: musc: t. 35. f.  
14. (In totius orbis terrarum regionibus temperatis et  
calidis ad terram rarius in arboribus sec: BRID: *Pedem*:  
ubique ad arborum radices ALL: n. 2488. Circa sylvas  
RE fl: segus: p. 86. In sylvis et pascuis agri *Taurin*:  
BALB: fl: taur: p. 181. Supra tellurem ad confluentem  
*Cerundæ* cum *Stura* prope *Atlessanum* RE app: I. p.  
40. sub *H. tamariscino*. In pratis et sylvis collium

BIROLI II: acon: II. p. 162.). Adscendens divisum subtriplicato - pinnatum longitudine mire varians, folia imbricata cordato - triquetra serrulata dorso papillosa e viridi flavescentia vel flava nervo supra medium evanido seta lævi, capsula ovato - oblonga operculo rostrato; stirps polymorpha. Huc referenda *H. recognitum* et *delicatulum* HEDW.; *H. parietinum* W. non SW: Nomen a L. impositum retinui uti antiquius.

\* 33. *H. splendens* = Hedw: sp: p. 262. t. 67. f. 7. 9. = Brid: bryol: univ: II. p. 435. = Spr: syst: IV. 209. Bals: et Denot: prodr: p. 74. *H. parietinum* SW: non W. (*Eur: Asia min: Amer: bor: Pedem:* in sylvis et in pascuis Re fl: tor: II. p. 207.). Priori admodum affine, sed distinguitur splendore foliorum quæ in illo opaca evadunt, ac eorum forma *ovata* longe *acuminata* margine *reflexa*, et demum capsula *ovata* operculoque *longius* rostrato.

### Sect: VII.

*Squarrosa* Arn: disp: meth: p. 314.

(Surculi pinnati vel varie ramosi, folia squarrosa.).

\* 34. *H. cuspidatum* = L. sp: 1595. = Hook: et Tayl: musc: brit: p. 178. t. 26. = Spr: syst: IV. 209. Bals: et Denot: prodr: p. 89. *H. Stereodon cuspidatus* Brid: bryol: univ: II. p. 562. Dill: musc: t. 39. f. 34. (*Eur: fere tota, Amer: bor: Pedem: secus fossas et loca spongiosa ALL: n. 2502. Habeo ex Sabaud: lectum Aix près la Fontaine martiale de S. Simond a PERRET*). Sub-erectum simpliciter pinnato - ramosum



ramis cuspidatis, folia laxè imbricata ovato - acuta integra obsolete brevissimeque 2 - nervia pallide viridia vel aurea, seta lævis, capsula oblongo - arcuata cernua grandiuscula operculo conico.

\* 35. *H. loreum* = L. sp: 1593. = Hook: et Tayl: musc: brit: p. 181. t. 26. = Brid: bryol: univ: II. p. 515. Spr: syst: IV. 203. Dill: musc: t. 39. f. 40. (*Eur: fere tota, Amer: bor: Pedem: in montibus inter Giverno et Quasse ALL: n. 2497. RE fl: segus: p. 87. Habeo ex sylvis montanis provinc: Novar: a DENOT:.*) Decumbens crassiusculum rigidum sub-radicans pinnatim ramosum ramis sub-simplicibus compressiusculis, folia imbricata caulina patenti - reflexa cordato - acuminata ramea patentia ovato-acuminata omnia serrulata undulata sub-enervia, seta lævis, capsula subrotunda cernua operculo conico mucronulato.

\* 36. *H. stellatum* = Mart: fl: crypt: erlang: p. 30. = Hook: et Tayl: musc: brit: p. 180. t. 26. = Spr: syst: IV. 203. Bals: et Denot: prodr: p. 90. *H. Stereodon stellatus* Brid: bryol: univ: II. p. 600. Var:  $\alpha$  *majus* Schreb: spicil: fl: lips: p. 92. Dill: musc: t. 39. f. 35.  $\beta$  *minus*. *H. protensum* Brid: musc: II. 2. p. 85. t. 2. f. 3. (*In turfosis paludosis Eur: et Amer: bor: Pedem: e similibus locis habeo a DENOT: Sabaud: a PERRET.*) Adscendens vage vel sub - pinnatim ramosum ramis erectiusculis sub-fastigiatis, folia imbricata patenti-squarrosa cordato - acuminata integra breviter et obsolete 2 - nervia, capsula ovato-oblonga arcuata cernua operculo conico. Var:  $\beta$  *crescit ad rupes humidas in montanis, tenuior evadit et gaudet caule procumbente pinnatim ramoso, foliisque læte virentibus.*

\* 37. *H. reflexum* = Schwægr: suppl: II. p. 161. t. 143. = Hook: et Tayl: musc: brit: p. 157. t. 24. = Brid: bryol: univ: p. 461. Spr: syst: IV. 205. (*Eur: septentr:; Gallia orient: Pedem: in sylvis vallis Canobina provinc: Novariens: DENOT: mant: n. 25.*). Procumbens divisum ramis sub-confertis teretibus incurvis, folia laxè imbricata cordato-acuminata sub-serulata nervo sub-continuo, seta scabriuscula, capsula ovata inclinata operculo conico obtuse apiculato.

\* 38. *H. Schleicheri* = Hedw: fil: in Web: et Mohr: beytr: I. p. 128. t. 7. = Brid: bryol: univ: II. p. 403. = Spr: syst: IV. 208. (*Helvet:; Gallia austr:; Ital: Pedem: in sylvis humidis ad terram DENOT: mant: n. 26.*). Arcuato-decumbens sub-pinnato-ramosum, folia sub-disticha ovato-lanceolata serrulata nervo ad medium evanescente, seta muriculata, capsula ovato-ventricosa cernua operculo deorsum curvi-rostro.

\* 39. *H. umbratum* = Ehrh: crypt: exsic: n. 66. = Hedw: spec: p. 263. t. 67. f. 10. 12. = Brid: bryol: univ: II. p. 433. Spr: syst: IV. 210. (*Eur: bor: et med:; Amer: bor: Pedem: in sylvis montanis prov: Novar: DENOT: mant: n. 27.*). Procumbens sub-divisum irregulariter bipinnatum, folia imbricata cordato-acuminata plicato-striata serrulata inæqualiter 2-nervia, seta sub-gemina crassa, capsula obovata cernua operculo conico acuto.

\* 40. *H. Halleri* = L. fil: meth: musc: p. 375. = Hook: et Tayl: musc: brit: p. 180. suppl: I. = Spr: syst: IV. 204. Bals: et Denot: prodr: p. 92. *H. Stereodon Halleri* Brid: bryol: univ: II. p. 603. (*Helvet:; German: austr:; Ital: ad rupes supra Canzo.*

*Pedem*: ad rupes in montibus supra *August: Prætor*:  
 DENOT: mant: n. 28.). Repens dense ramosum ramis  
 sub-simplicibus erectis, folia arcte imbricata patenti-  
 reflexa ovato-acuminata serrata enervia fusco-lute-  
 scentia, seta lævis, capsula oblongo-ovata cernua  
 operculo conico.

\* 41. *H. squarrosus* = L. sp: 1593. = Hook: et  
 Tayl: musc: brit: p. 182. t. 26. = Brid: bryol: univ:  
 II. p. 511. Spr: syst: IV. 203. Bals: et Denot: prodr:  
 p. 93. (*Eur*., *Amer*: bor: *Pedem*: in sylvis vulgare  
 ex DENOT: Habeo etiam a PERRET ex udis nemorosis  
*Sabaud*: ubi rarissimum). Adscendens sub-simplex  
 vel sub-pinnatim ramosum, folia arcte imbricata e  
 basi lata cordata amplexante acuminata recurva ser-  
 rata breviter 2-nervia viridi-splendentia, seta lævis,  
 capsula ovato-globosa cernua operculo breviter conico  
 mucronulato, caulis purpureo-rutilans.

\* 42. *H. brevirostre* = Ehrh: crypt: exsic: n. 85.  
 = Hook: et Tayl: musc: brit: p. 182. suppl: t. 5. =  
 Brid: bryol: univ: II. p. 506. Spr: syst: IV. 203.  
 Bals: et Denot: prodr: p. 94. (*Eur*: passim, *Amer*:  
 bor: *Pedem*: in sylvis montanis et collinis provinc:  
*Novar*: vulgatissimum, ad lacum *Cusii* primum fru-  
 ctificans DENOT: mant: n. 29.). Rigidum irregulariter  
 ramosum, folia imbricata late cordato-ovata concava  
 undulata serrata basi 2-nervia nitenti-viridia vel fu-  
 scescentia, capsula ovato-ventricosa cernua operculo  
 conico attenuato incurvo truncato mucronato capsula  
 multo brevior.

\* 43. *H. triquetrum* = L. sp: 1589. = Hook: et  
 Tayl: musc: brit: p. 182. t. 26. = Brid: bryol: univ:



II. p. 508. Spr: syst: IV. 203. Bals: et Denot: prodr: p. 95. Dill: musc: t. 38. f. 28. (*Eur: fere tota, C. B. S., in ins: Terra-nova. Pedem: ubique in sylvis et pascuis montanis vulgatissimum* ALL: n. 2485. Re fl: tor: II. p. 209. In sylvis umbrosis et pratis *Ticini BIROLI* fl: acon: II. p. 162. Ex *Sabaud: ad terram prope Aix* habeo a PERRET). Præcedenti robustius pinnatim ramosum ramis compressiusculis caule multo gracilioribus, folia imbricata patenti-squamosa cordato-triquetra acuminata breviter 2 - nervia nitenti - lutescentia, seta nitida, capsula ovata cernua badia operculo conico brevi-mucronato.

### Sect: VIII.

*Adunca* Arn: disp: meth: p. 315.

(Surculi varie ramosi vel pinnati, folia secunda vel circinnato-falcata nitentia ovata vel lanceolata).

\* 44. *H. palustre* = L. sp: 1593. = Hook: et Tayl: musc: brit: p. 185. t. 26. = Spr: syst: IV. 202. Bals: et Denot: prodr: p. 102. excl: *H. subsphærocarpo. H. Stereodon palustris* Brid: bryol: univ: II. p. 639. Dill: musc: t. 37. f. 27. (*Eur: passim, Amer: bor: Pedem: locis spongiosis in montibus et collibus* ALL: n. 2496. Vulgare ad rupes humidas ad muros palos aquæductuum etc.). Repens ramosum ramis subsimplicibus rectis curvatisve, folia laxè imbricata falcato - secunda ovato - acuta integra viridia aurea vel rufescentia nitida nervo simplici vel gemino brevi te-

nui, seta lævis tortilis mire varians longitudine, capsula collo quandoque constricta fusco-rutilans operculo attenuato obtusiusculo recto. Variat multimode.

\* 45. *H. subsphæricarpon* = Schleich: cent: II. n. 46. = Funck: moostasch: p. 67. t. 53. = *H. Stereodon subsphæricarpus* Brid: bryol: univ: II. p. 641. *H. sphærocarpon* Spr: syst: IV. 201. *H. palustre* ex parte Bals: et Denot: prodr: p. 102. (Alpib: *Eur*: med: *Pedem*: ad rupes madentes in alpib: *Penninis* DENOT: mant: n. 30.). Præcedenti, cum quo sæpe confusum ab Auctoribus, valde affine; distinguitur tamen habitu et statura *robustiore*, caule ramisque basi prorsus *denudatis*, foliis superioribus *sub-falcatis ovato-lanceolatis*, nervo prope apicem desinente *conspicuo*, capsula tandem *ovato-rotundata sub-erecta*.

\* 46. *H. plicatum* = Schleich: cent: IV. n. 27. = *H. Stereodon plicatus* Brid: bryol: univ: II. p. 637. = Ic: ? (*Helvet*: monte *la Varaz*. *Pedem*: in sylvis montanis editis DENOT: mant: n. 31.). Adscendens sub-pinnatum ramis teretibus, folia ovato-lanceolata longe acuminata plicata nervo crassiusculo continuo; fructus ignotus ut sciam.

\* 47. *H. rugulosum* = Web: et Mohr: bot: tasch: p. 363. = Hook: et Tayl: musc: brit: p. 187. t. 26. = Bals: et Denot: prodr: p. 105. *H. Stereodon rugosus* Brid: bryol: univ: II. p. 633. *H. rugosum* Spr: syst: IV. 201. ? (*Eur*: passim. In pascuis aridis montanis et collinis inque sylvis totius *Ital*: super: DENOT: mss: In spongiosis circa lacum *M. Cenisii* ALL: n. 2482. sub *H. rugoso*? Re fl: segus: p. 87.). Adscendens ramosum sub-pinnatum ramis crassis incurvis

quandoque sub - secundis , folia arete imbricata sub-falcato-secunda late ovato-acuminata serrulata nervo supra medium evanido. Fructificatio ignota , species igitur dubia. Habeo a DENOT: ex sylvis aridis et ericetosis montanisque , non ex *M. Cenisio* ubi legit ALL:; forsan hujus planta ad var:  $\beta$  *H. adunci* referenda.

\* 48. *H. scorpioides* = L. sp: 1592. = Hook: et Tayl: musc: brit: p. 188. t. 27. = Spr: syst: IV. 202. *H. Stereodon scorpioides* Brid: bryol: univ: II. p. 637. Dill: musc: t. 37. f. 25. (*Eur: septentr: et med: paludibus. Pedem: in valle Ursina* ALL: n. 2494.). Herba differt a priori statura valde majori, caule procumbente, foliis oblongis integerrimis enerviis. Inter plura specim: quæ possideo unicum fructificans habeo ex *Helvet:* ac exhibet setam fere biuncialem solitariam lævem purpuream, capsulam ovato - oblongam sub-arcuatam ferrugineam, operculum conicum brevissime apiculatum.

\* 49. *H. filicinum* = L. sp: 1590. = Hook: et Tayl: musc: brit: p. 183. t. 26. = Brid: bryol: univ: II. p. 527. Spr: syst: IV. 201. excl: syn: Hedw: Bals: et Denot: prodr: p. 99. Dill: musc: t. 36. f. 19. (*Eur: fere tota. Pedem: in humidis locis montanis et sub-alpinis frequentissimum* ALL: n. 2487. In omnibus pascuis umbrosis RE fl: segus: p. 86. In uliginosis sylvarum collium RE fl: tor: II. p. 209. In pratis et sylvis collium BIROLI fl: acon: II. p. 162.). Polymorphum hinc synonymia obscura ac incerta, pro qua consulendi Auctores supra citati. Caulis decumbens vel erectiusculus pinnatus vel vage ramosus sæpius



inferne radicans, folia caulina patenti - erecta late ovato - triquetra acuminata ramea ovato - lanceolata falcato - secunda serrulata læte vel squallide viridia subindeve fusca vel rutilantia, capsula oblonga arcuata cernua operculo conico.

\* 50. *H. commutatum* = Hedw: musc: IV. p. 68. t. 26. = Hook: et Tayl: musc: brit: p. 188. t. 27. = Brid: bryol: univ: II. p. 523. Bals: et Denot: prodr: p. 101. *H. filicinum* Spr: syst: IV. 201. (*Eur.*, monte *Atlante*, *Asia*. *Pedem*: ad rupes humidas collium montiumque vulgare BALE: el: p. 5. Habeo ex alpibus *Pennin*: a DENOT:). A priore, cum quo confusum a SPR:, differt habitu *elegantiore*, caule fere *pectinatim* pinnato, pinnis *incurvis recurvisve*, foliis *cordato-ovatis* nervo supra medium desinente pallide viridibus vel lutescentibus nitidis.

\* 51. *H. falcatum* = Brid: musc: rec: II. P. 2. p. 63. t. 1. f. 6. et bryol: univ: II. p. 526. = Spr: syst: IV. 201. (*Eur*: med: *Pedem*: ad rivulos in monte *Sempronii Italiam* versus DENOT: mant: n. 32.). Repens vel fluitans superne pinnato - ramosum ramulis incurvis, folia imbricata ovato - lanceolata carinata falcato - secunda sub - striata integerrima nervo sub - continuo, capsula ovata operculo convexo curvi-rostro. Habitus *H. commutati*, sed laxius et magis elongatum.

\* 52. *H. uncinatum* = Hedw: musc: IV. p. 65. t. 25. = Hook: et Tayl: musc: brit: p. 187. t. 26. = Spr: syst: IV. 201. Bals: et Denot: prodr: p. 104. *H. Stereodon uncinatus* Brid: bryol: univ: II. p. 629. (*Eur.*, *Asia* bor:, ins: *Terra-nova*. *Pedem*: ad pedes arborum in sylvis montanis omnium vulgatissimum DENOT:

mant: n. 33.). Ab affinibus, cum quibus forsan confusum a Botanicis nostratibus, distinguitur caule *flacido* laxè sub-pinnatim ramoso, ramis apice *uncinatis*, foliis *lanceolatis* longè *subulatis* perichæcialibus angustis *longissimis* pallide virentibus vel aureis.

\* 53. *H. aduncum* = L. sp: 1592. = Hedw: musc: IV. p. 62. t. 24. = Spr: syst: IV. 201. Bals: et Denot: prodr: p. 103. *H. Stereodon aduncus* Brid: bryol: univ: II. p. 623. Dill: musc: t. 37. f. 26. (*Eur*., *Amer*: bor., ins: *Melville*, *Terra-nova*, *N. Holl*: *Pedem*: in pascuis humidis montanis ALL: n. 2493. Ad aquas e fontibus manantes RE fl: segus: p. 87. In paludosis inter *Pecetto* et *Revigliasco* RE fl: tor: II. p. 210. In pascuis *di Ornavasso* BIROLI fl: acon: II. p. 163.). Polymorphum, caulis erectiusculus pinnatim laxè ramosus vel proinde fere omnino simplex, folia imbricata falcato-secunda recurvata e basi ovata lanceolato-acuminata integra nervo supra medium evanido, capsula ovata oblonga arcuata cernua operculo conico acuto. Pro varr: cons: BRID: l. c.

\* 54. *H. fluitans* = L. fl: succ: ed: 2. p. 399. = Hook: et Tayl: musc: brit: p. 186. t. 24. = Spr: syst: IV. 201. Bals: et Denot: prodr: p. 104. *H. Stereodon fluitans* Brid: bryol: univ: II. p. 626. Dill: musc: t. 38. f. 33. (In aquis *Eur*., *Asiæ* bor., *Amer*: bor: *Pedem*: in paludosis rivulisque lente fluentibus ex DENOT: sine fructu). A priori distinguitur caule *fluitante* vel *procumbente parce ramoso*, foliis *laxis lanceolatis subulatis sub-integris*. « Ex *Ital*: super: fructiferum non possidemus. » DENOT:

\* 55. *H. Crista castrensis* = L. sp: 1591. excl:

syn: Dill: = Hook: et Tayl: musc: brit: p. 190. t. 27. = Brid: bryol: univ: II. p. 517. Spr: syst: IV. 203. (*Eur: fere tota, Amer: bor:, ins: Terra-nova, Mascaren:, C. B. S. Pedem: in sylvis præsertim montanis ad radices arborum ALL: n. 2490. RE fl: segas: p. 87. In collium Taurinens: sylvis BALB: fl: taur: p. 182. RE fl: tor: II. p. 209.?* Ad radices arborum in sylvis alpinis BIROLI fl: acon: II. p. 163. excl: in omnibus syn: DILL:). Procumbens pectinato - pinnatum ramis apice recurvis, folia imbricata falcato - secunda circinnata ovato - lanceolata acuminata striata serrata sub - ernervia, capsula oblongo - ovata arcuata cernua operculo conico acutiusculo.

\* 56. *H. molluscum* = Hedw: musc: IV. p. 56. t. 22. = Brid: bryol: univ: II. p. 519. = Spr: syst: IV. 203. Bals: et Denot: prodr: p. 110. Dill: musc: t. 36. f. 20. (*Eur: passim. Pedem: ad muros rupes saxa vulgare ex DENOT:).* Facile confundendum cum priori, cum quo forsitan commutatum fuit a cll: BALB: et RE, nec non a DC. fl: fr: n. 1349., verum enim *H. Crista castrensis* L. provenit tantum in montanis; ab hoc tamen distinguitur statura multo *minori*, caulibus *implexis* quandoque e dorso *proliferis*, foliis *cordato - ovatis exstriatis* breviter et obsolete 2 - nerviis, colore demum saturate *flavo-viridi*.

\* 57. *H. cupressiforme* = L. sp: 1592. = Hook: et Tayl: musc: brit: p. 189. t. 27. = Spr: syst: IV. 202. Bals: et Denot: prodr: p. 106. *H. Stereodon cupressiformis* Brid: bryol: univ: II. p. 605. Dill: musc: t. 36. f. 22. 37. f. 23. et 41. f. 53. *H. compressum* L. non Schreb: *H. polyanthos* Sm: non Schreb:



*H. nigro-viride* Dicks: *H. decipiens* Hoffm: (*Eur*: fere tota, *Asia* et *Amer*: hor: *Pedem*: frequentissimum in sylvis ad arborum radices ALL: n. 2492. *Sardin*: ad rupes et ad truncos arborum in sylvis MORIS st: sard: III. p. 15.). Inter congenera, quamvis versatile, distinguitur foliis imbricatis lanceolato-acuminatis integris vel obsolete denticulatis basi breviter obscure 2-nerviis, capsula cylindracea erecta incurva, operculo conico breviter rostellato. Varr: innumeræ nullis certis limitibus distinctæ.

\* 58. *H. protuberans* = Denot: mant: n. 34. = *H. Stereodon protuberans* Brid: bryol: univ: II. p. 612. = Ic: ? (In saltus *Thuringici* sylvis observavit BRID: l. c. *Pedem*: in sylvis vallis *Vegezzo* ad truncos DENOT: l. c.). Repens divisum ramis sub - simplicibus confertis, folia patulo - incurva sub - secunda 2-nervia apice serrulata, capsula sub - cylindrica erectiuscula operculo basi protuberante alte convexo rostellato. Habitus prioris sed tenuior.

\* 59. *H. demissum* = Denot: mant: n. 35. = Ic: ? (Ad rupes in valle *Intrasca* ad *Verbanum* DENOT: l. c.). » Facies *H. incurvati* SCHRAD:, sed multoties majus » et robustius ab illo operculi forma differt, sicuti et » forma et directione capsulæ et dispositione foliorum » ab omnibus varr: *H. cupressiformis* hucusque cognitis. » DENOT:

\* ? 60. *H. clavellatum* = L. sp: 1596. = Dill: musc: t. 85. f. 17. = All: fl: *Pedem*: n. 2510. *Gymnostomum prorepens* Brid: bryol: univ: I. p. 93. ? *Macromitrium clavellatum* Spr: syst: IV. 161. (*Pedem*: in lignis corruptis innascitur ALL: n. 2510.). Plantam ALL:

non vidi; ex citatis Auctoribus stirps Dilleniana *Amer:* inhabitat. *H. clavellatum* HEDW: quod BALS: et DENOT: enumerant sub *H. conferto* (prodr: p. 88.) ad hoc non pertinet.

\*? 61. *H. tamariscinum* = Re fl: tor: II. p. 207. (Prope *Venariam* RE l. c.). Planta mihi dubia. Syn: cl: RE sc: *Hookeria tamariscina* crescit tantummodo inter tropicos, monentibus cll: BRID: bryol: univ: II. p. 715. sub *Hypopterygio*, et SPR: syst: IV. 198. sub *Hookeria*.

XVI. LEPTOHYMENIUM Hüben: muscol: germ: p. 554. = *Pterogonii*, *Pterigynandri*, *Maschalocarpi*, et *Hypni* spec: alior: (Inter *Pleurocarpos peristomos* BRID:).

» *Seta* lateralis. *Peristom*: exter: dentibus 16., inter: »  
» membrana tenuis dentibus exterioribus brevior mar- »  
» gine sub-integra. *Calyptra* dimidiata glabra. »

*Obs*: Structura peristomii interioris *edentuli* et sine ciliis distinguit ab *Hypno* hoc novum genus constans 2-3. stirpibus.

\* 1. *L. gracile* = Hüben: l. c. = Sub *Pterogonio* Sw: = Hook: et Tayl: musc: brit: p. 74. t. 14. Bals: et Denot: prodr: p. 111. Sub *Pterigynandro* BRID: bryol: univ: II. p. 174. Sub *Maschalocarpo* SPR: syst: IV. 158. Sub *Hypno* L. syst: veg: p. 952. Dill: musc: t. 41. f. 55. (*Eur.*, *Amer*: bor:, ins: *Mascaren*: *Pedem*: ad rupes montium præsertim in agro *Novariens*: frequens DENOT: mss: *Sardin*: ad truncos arborum vulgatissimum MORIS st: sard: III. p. 16. sub *Pterigynandro*). E basi repente adscendens superne ramosum ramis secundis incurvis, folia arcte imbricata ovata

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acuta planiuscula serrata basi 2-nervia, capsula oblonga rutilans operculo conico brevi dilutius colorato.

\* 2. *L. filiforme* = Hüben: l. c. p. 552. = Sub *Pterogonio* Sw: = Hook: et Tayl: musc: brit: p. 75. t. 14. Bals: et Denot: prodr: p. 111. Sub *Pterigynandro* Brid: bryol: univ: II. p. 177. Sub *Maschlocarpo* Spr: syst: IV. 159. (*Eur.*, *Amer.*: bor: *Pedem.*: ad truncos arborum et ad saxa in montibus vulgarissimum præsertim ad fagos in sylvis montanis prov: *Novar.*: DENOT: mss:). Differt a priori statura minori, caule *procumbente*, ramis *elongatis filiformibus*, perigonio exteriori *tenuiori fugace*, ex quo ad *Pterogonium* magis accedit.

#### Trib: IV.

#### P T E R O G O N O I D E Æ

Bals: et Denot: prodr: p. 110. (*Seta* lateralis; *peristoma* simplex; *calyptra* dimidiata).

XVII. LEPTODON Web: et Mohr: = Brid: bryol: univ: II. p. 197. t. 111. suppl: f. 6. = *Pterogonii*, *Pterigynandri*, *Lariæ* etc. spec: quorund: (Inter *Pleurocarpos peristomos* Brid:).

» *Seta* lateralis. *Peristom.*: simplex dentibus 16. brevissimis. *Calyptra* dimidiata inferne pilis longissimis hirta. »

*Obs.*: Genus a præcedente defectu peristomii interioris et calyptra basi hirsuta satis distinctum, valde



ad *Pterogonium* accedens et ab eo vix separandum, constans unica specie sequenti.

\* 1. *L. Smithii* = Mohr: obs: p. 27. = Brid: l. c. Sub *Pterogonio* Sw: = Hook: et Tayl: musc: brit: p. 74. t. 14. Denot: mss: Sub *Pterigynandro* DC. aliique. Sub *Mascalocarpo* Spr: syst: IV. 159. (In orbe fere toto. In *Pedem*: non adhuc repertum ut sciam. In *Ligur*: orient: ad arborum cortices BERTOL: am: ital: p. 54. sub *Pterogonio*. *Sardin*: ad rupes et truncos arborum frequens MORIS st: sard: III. p. 15. Habeo ex *Helvet*: a PERRET et ex *Sardin*: a DENOT:). Procumbens pinnatim ramulosum ramis pinnatis incurvis, folia imbricata sub-orbiculata integra nervo valido ultra medium producto, seta folia perichætialia sub-æquans, capsula oblonga erecta operculo rostrato.

XVIII. LEUCODON Schwægr: suppl: 1. 2. p. 1. = Brid: bryol: univ: II. p. 207. t. IX. f. 3. = Spr: syst: n. 3314. = *Hypni*, *Dicrani*, *Fissidentis* etc. spec: Auctor: (Inter *Pleurocarpos peristomos* Brid:).

» *Seta* lateralis. *Peristom*: simplex, dentibus 32.  
 » angustis lanceolatis basi per paria in membranam  
 » coalitis (dentes 16. bipartibiles BRID:). *Calyptra*  
 » dimidiata. »

*Obs*: Genus constans 5-6. stirpibus, nonnullis obscuris, 1-2. tantum europæis.

\* 1. *L. sciuroides* = Schwægr: l. c. = Hook: et Tayl: musc: brit: p. 112. t. 20. = Brid: bryol: univ: II. p. 208. Spr: syst: IV. 169. Bals: et Denot: prodr: p. 112. Dill: musc: t. 41. f. 54. Sub *Pterogonio* Turn:

Sub *Fissidente* Hedw: Sub *Trichostomo* Web: et Mohr:  
 Sub *Dicrano* Sw: Sub *Hypno* L. sp: 1596. alique  
 (*Eur*: fere tota, *Amer*: septentr: *Pedem*: in corticibus  
 arborum locis umbrosis ALL: n. 2509. BIROLI fl: acon:  
 II. p. 164. sub *Hypno*. *Sardin*: ad truncos arborum  
 in sylvis *Arizzo* MORIS st: sard: III. p. 15.). Repens  
 ramosus ramis sub - simplicibus teretiusculis erectis  
 siccitate recurvatis, folia imbricata ovato - lanceolata  
 enervia, capsula ovato-oblonga erecta operculo conico  
 brevissime rostrato. *L. morensis* SCHLEICH: cum *sciuroideo*  
 sæpe commixtus, non differt nisi caule bre-  
 viori, ramis crassioribus, foliis latioribus, peristomii  
 dentibus imperforatis (pertusis in *sciuroideo* BRID:).

XIX. *FABRONIA* Raddi att: acad: scienc: Sien: t. IX. p.  
 230. = Brid: bryol: univ: II. p. 168. t. VIII. f. 9.  
 = Spr: syst: n. 3302. = *Grimmiæ* et *Hypni* spec:  
 nonnullæ quorund: (Inter *Pleurocarpos peristomos*  
 BRID:).

» *Seta* lateralis. *Peristom*: simplex, dentibus 16.  
 » coriaceis per paria approximatis introrsum flexis  
 » sæpe et iterum in duos fissis. *Calyptra* dimidiata. »

*Obs*: Dentium perigonii flexio vix distinguit ab af-  
 finibus hoc genus constans 5 - 6. stirpibus, quarum  
 2 - 3. europææ.

1. *F. pusilla* = Raddi l. c. *Grimmia inconspicua*  
 Bertol: (*Etruria*, *Gallia*. *Sardin*: ad corticem oleæ  
 europææ sylvestris *Iglesias* MORIS st: sard: III. p. 14.).  
 Pumila repens vage ramosa, folia sparsa lato-lanceo-  
 lata mucronata enervia, capsula urceolata operculo  
 convexo-rostrato.

\* 2. *F. octoblepharis* = Schwægr: suppl: 1. 2. p. 338. t. 99. f. a. b. = Spr: syst: IV. 150. = *F. ciliaris* Brid: bryol: univ: II. p. 171. (*Helvet: Pedem: ad saxa prope Condove* DENOT: mant: n. 38.). Differt a priori statura paullo *majore*, foliis *lterioribus sub-imbricatis* evidentius *ciliatis* nervo obsoleto brevi instructis, capsula *ovata*.

\* 3. *F. major* = Denot: mant: n. 37. (*Pedem: ad muros agrorum in valle Vegezza* prov: *Novar: DENOT: l. c.*). A *pusilla* differt foliis nervo donatis minus fortiter serratis, ab *octoblephari* foliis lanceolatis planis longe acuminato-piliferis nec ovatis nec concavis, ab utraque statura duplo *majore*. « *Habitus, divisio caulis, indoles foliorum, capsulæ forma et calyptra* » *Fabroniis* plantam nostram, etsi peristomio non » viso, naturaliter adscribunt. » DENOT:

## Trib: V.

## DICRANOIDEÆ

Arn: disp: meth: p. 272.

XX. TORTULA Schreb: gen: pl: II. p. 760. = Hook: et Tayl: musc: brit: p. 52. t. 2. = *Tortula* et *Barbula* Hedw: sp: = *Barbula* et *Syntrichia* Brid: bryol: univ: I. p. 527. 578. t. V. f. 2. 3. = Spr: syst: n. 3320. 3321. (Inter *Acrocarpos peristomos* Brid:).

» *Seta terminalis. Peristom: simplex dentibus 32.*  
 » spiraliter tortis basi plus minus in membranam  
 » subtilem concretis (*Syntrichia*), vel omnino liberis  
 » (*Barbula*). *Calyptra* dimidiata. »



*Obs:* In unum genus conjungendas *Syntrichiam* MOHR: et *Barbulam* HEDW: suadet tenuissima inter ipsas differentia in peristomii dentium dispositione quam ipse BRID: (l. c. p. 528. in nota) inconstantem esse recognovit. Spec: 40. et ultra, quarum multæ europææ.

*Sect: I.*

*Syntrichia.*

\* 1. *T. ruralis* = Hook: et Tayl: musc: brit: p. 56. t. 12. = Bals: et Denot: prodr: p. 114. = Sub *Syntrichia* Brid: bryol: univ: I. p. 584. Spr: syst: IV. 177. Sub *Barbula* Hedw: sp: p. 121. aliiq. Sub *Bryo* L. sp: 1581. aliiq. Dill: musc: t. 45. f. 12. (*Eur:* fere tota, *Asia* et *Amer:* bor: *Pedem:* ubique frequens ad muros et in tectis ALL: n. 2455. sub *Bryo*. RE fl: tor: I. p. 196. sub *Syntrichia*. BIROLI fl: acon: II. p. 159. sub *Bryo*. *Sardin:* ad muros et in campis frequens MORIS st: sard: III. p. 16. sub *Syntrichia*). Erecta ramosa, folia ovato-oblonga patenti-recurva carinata integerrima apice obtusa pilifera, capsula cylindracea erecto-cernua operculo conico.

\*? 2. *T. subulata* = Sw: musc: succ: p. 39. = Hook: et Tayl: musc: brit: p. 57. t. 12. = Bals: et Denot: prodr: p. 114. Sub *Syntrichia* Brid: bryol: univ: I. p. 579. Spr: syst: IV. 178. Sub *Barbula* Brid: spec: aliiq. Sub *Bryo* L. sp: 1581. aliiq. Dill: musc: t. 45. f. 10. (*Eur:* passim, *Antillis*. *Pedem:* ad aggeres et in pascuis sub-humidis sylvarum ALL: n.

2454. sub *Bryo*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p. 192. sub *Syntrichia*. In pascuis *Ticini* vulgaris BIROLI fl: acon: II. p. 159. sub *Bryo*. *Sardin*: ad muros et in campis frequens MORIS st: sard: III. p. 16.). Differt a priori statura valde *humiliori*, caule *sub - simplici*, foliis *oblongo - lanceolatis* apice *acutis* mucronulatis nec piliferis, capsula *erecta*, operculo evidentius *subulato*.

Sect: II.

*Barbula*.

α Caule brevi sub-simplici.

\* *Foliis piliferis*.

\* 3. *T. muralis* = Hedw: spec: 123. = Hook: et Tayl: musc: brit: p. 55. t. 12. = Bals: et Denot: prodr: p. 119. Sub *Barbula* Brid: bryol: univ: I. p. 546. Spr: syst: IV. 178. aliiue. Sub *Bryo* L. sp: 1581. aliiue. Dill: musc: t. 45. f. 14. (Ad muros præsertim totius orbis raro ad terram. *Pedem*: in tectis et muris passim ALL: n. 2456. sub *Bryo*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p. 195. sub *Barbula*. BIROLI fl: acon: II. p. 159. sub *Bryo*. *Sardin*: ad saxa murosque vulgatissima MORIS st: sard: III. p. 13. sub *Barbula*). Polymorpha; ludit caule brevissimo vel elongato, foliis oblongis vel oblongo - spathulatis longe vel breviter piliferis carinatis vel planis, setis purpureis vel flavicantibus, capsula oblonga vel cylindrica.

\* 4. *T. chloronothos* = Brid: sp: I. p. 253. = Bals: et Denot: prodr: p. 120. Sub *Barbula* Brid: bryol: univ: I. p. 539. = Schult: rec: de *Barbula* t. 34. f. 30. *B. membranifolia* ibid: t. 34. f. 35. Spr: syst: IV. 178. (*Eur: austr: , Tenerif: Pedem: ad rupes in collibus ad Verbanum* DENOT: mant: n. 39. *Sardin: ad margines agrorum in umbrosis MORIS st: sard: III. p. 12. sub Barbula*). Ab omnibus congeneribus foliis albo - membranaceis longe piliferis, nervo latissimo crasso viridi donatis statim distinguitur.

\*\*\* *Foliis mucronulatis vel muticis.*

5. *T. cuneifolia* = Hook: et Tayl: musc: brit: p. 59. t. 12. Brid: bryol: univ: I. p. 549. *Barbula Dicksoniana* Spr: syst: IV. 179. ex Schult: (*Anglia, Pyren:, Canar: Sardin: in arenosis frequens MORIS st: sard: III. p. 13. sub Barbula*). Folia late obovata concaviuscula nervo mucronata pallida, capsula oblonga operculo brevi-rostro.

\* 6. *T. rigida* = Turn: musc: hibern: p. 43. = Hook: et Tayl: musc: brit: p. 53. t. 12. = Bals: et Denot: prodr: p. 121. Sub *Barbula* plur: auctor: non Hedw: *Trichostomum aloides* Brid: bryol: univ: I. p. 816. Spr: syst: IV. 170. (*German:, Anglia, Gallia austr: Pedem: BALB: cl: p. 3. excl: syn: BRID: In collibus Taurinens: DENOT: mss: Habeo ex arenosis prope Albam a BERTERO. Sardin: ad muros et in pascuis collinis Iglesias MORIS st: sard: III. p. 13. sub Barbula*). Folia rosulata oblonga obtusa vix mucronulata margine involuta concava nervo latiusculo parum con-



spicuo, capsula oblonga operculo subulato. *B. rigida* HEDW: distinguitur foliis omnino enerviis; hanc nunquam vidisse ex *Ital*: affirmat DENOT: mss:

β Caule elongato ramoso fastigiato.

\* *Foliis uniformibus mucronatis.*

\* 7. *T. unguiculata* = Brid: suppl: I. p. 258. = Hook: et Tayl: musc: brit: p. 57. t. 12. = Bals: et Denot: prodr: p. 118. Sub *Barbula* Brid: bryol: univ: I. p. 563. ex Hedw: Spr: syst: IV. 178. aliique. Sub *Bryo* L. mant: II. p. 309. Dill: musc: t. 48. f. 47. 49. *Br: tenue* All: n. 2461. ex Web: (*Eur*., *Amer*: bor: *Pedem*: terra innascitur in locis montanis ALL: l. c. BALB: el: p. 3. In collibus locis aridis non frequens, ad arcem di *Arona* abundat BIROLI fl: acon: II. p. 161. sub *Bryo unguiculato*. Ad muros vias margines agrorum passim DENOT: mss: *Sardin*: ad muros et in fossis frequens MORIS st: sard: III. p. 13. sub *Barbula*). Folia oblengo-lanceolata obtusiuscula, capsula sub-cylindrica operculo oblique acuminato. Stirps polymorpha varians statura plus minusve grandi, caule ramosiusculo vel simplici, foliis laxiusculis vel imbricatis, mucrone e nervo excurrente plus minus valido.

\*\* *Foliis uniformibus acuminatis vel muticis.*

\* 8. *T. fallax* = Sw: musc: suec: p. 40. = Hook: et Tayl: musc: brit: p. 60. t. 12. = Bals: et Denot: prodr: p. 115. Sub *Barbula* Brid: bryol: univ: I. p. 556.

ex Hedw: Spr: syst: IV. 180. aliique. Sub *Bryo* Dicks: aliique. *Br: imberbe* L. mant: II. p. 309. Dill: musc: t. 48. f. 46. (*Eur: Asia, Afr: Amer: Pedem: ad muros et ad terram iisdem fere locis ac præcedens* DENOT: mss: In sylvis collium *Taurinens: BELLARD: app: p. 50. sub Br: imberbe. Sardin: ad vias murosque frequens MORIS st: stard: III. p. 13. sub Barbula*). A priori, cum qua sæpe ab Auctoribus confusa, distinguitur foliis *lanceolato-acuminatis undique reflexis, capsula oblonga, operculoque longe restruto; variat caule plus minus brevi.*

\* 9. *T. paludosa* = DC. fl: fr: suppl: p. 223. n. 1265. = Denot: mant: n. 40. = Sub *Barbula* Schwægr: suppl: I. I. p. 124. t. 30. Brid: bryol: univ: I. p. 562. Spr: syst: IV. 180. (*German: Helvet: Sabaud: Pedem: in humidis collinis ad Verbanum DENOT: l. c.*). Erecta fastigiato-ramosa, folia lanceolata carinata superius crosso-denticulata patulo-reflexa, capsula erecta ovato-oblonga junior pellucido-luteola (*T. crecea* Brid: spec: I. p. 257.), maturitate lutea, operculo incurvo subulato.

\*\*\* *Foliis perichaetialibus arcte convolutis.*

\* 10. *T. revoluta* = Brid: in Schrad: journ: = Hook: et Tayl: musc: brit: p. 54. t. 12. = Bals: et Denot: prodr: p. 117. Sub *Barbula* Brid: bryol: univ: I. p. 571. Spr: syst: IV. 179. (*Eur: passim. Pedem: ubique ad muros vetustos DENOT: mss: Ipse legi cum PERRET similibus locis circa Aix in Sabaud:*). Cæspitosa fastigiato-ramosa, folia imbricata plus minus late

lanceolata acuta vel obtusiuscula in iisdem sæpe cæspitibus margine revoluta excurrenti - nervosa perichætialia vaginantia caulinis longiora involuta, capsula oblonga sub-incurva operculo conico subulato.

\* 11. *T. convoluta* = Sw: musc: succ: p. 41. = Hook: et Tayl: musc: brit: p. 54. t. 12. = Bals: et Denot: prodr: p. 117. Sub *Barbula* Brid: bryol: univ: I. p. 569. Spr: syst: IV. 180. *B. setacea* Hedw: *Bryum setaceum* Dicks: (*Eur:* passim. *Pedem:* ad terram in locis sterilibus DENOT: mss: *Sabaud:* supra muros *du J. Degallon* ex PERRET). Vix differt a priori foliis caulinis oblongo-lanceolatis planiusculis perichætialibus latis obtusis convolutis enerviis.

\*\*\*\* *Foliis perichætialibus basi vaginantibus subulatis.*

\* 12. *T. tortuosa* = Hedw: sp: p. 124. = Hook: et Tayl: musc: brit: p. 59. t. 12. = Bals: et Denot: prodr: p. 121. Sub *Barbula* Brid: bryol: univ: I. p. 574. ex Schwægr: Spr: syst: IV. 180. aliiq. Sub *Bryo* L. sp: 1583. aliiq. Dill: musc: t. 48. f. 40. (*Eur:*, *Amer:* bor: *Pedem:* passim in alpibus ad rupes ALL: n. 2464. sub *Bryo*. In locis humidis collinis et montanis DENOT: mss: Habeo e. *Sabaud:* ad rupes et muros a PERRET. *Sardin:* in arenosis plerumque montanis MORIS st: sard: III. p. 13. sub *Barbula*). Erecta divisa elongata, folia e basi tenerascente albidula lineari-setacea undulata sub-tortuosa excurrenti-nervosa siccitate summopere contorta, capsula recta cylindrica operculo longe rostrato.



\* 13. *T. inclinata* = Hedw: fil: in Web: et Mohr: beyt: I. p. 123. t. 5. = *T. nervosa* Brid: sp: I. p. 262. = Bals: et Denot: prodr: p. 120. *Barbula inclinata* Brid: bryol: univ: I. p. 575. ex Schwægr: suppl: 1. p. 131. t. 33. Spr: syst: IV. 180. (*Helvet: , German: , Ital: in sylvis Ticini et Abduæ ad terram humidam* BALS: et DENOT: l. c. *Pedem: in sylvis et locis glareosis ad amnes* DENOT: mss: Habeo etiam e *Sabaud: a PERRET sub erroneo nomine Barbulæ revolutæ*). A præcedenti vix distinguitur statura *humiliori*, foliis *lterioribus* et *brevioribus*, capsula *sub-incurva*.

XXI. DIDYMODON Denot: mss: = *Didymodon* Hedw: = *Didymodontis* spec: Hook: et Tayl: = *Trichostomi* spec: Hedw:

» *Seta terminalis. Peristom: simplex dentibus 16.*  
 » *bipartitis tripartitisve liberis, aut 32. per paria ap-*  
 » *proximatis. Capsula exapophysata. Calyptra dimi-*  
 » *diata (Char: ex DENOT: Inter Acrocarpos peristo-*  
 » *mos BRID:).* »

*Obs:* Genus quod, nomine Hedwigiano inspecto, species solas *dentibus* per paria *approximatis* instructas exhibere deberet, sed rite ipsi, ne affinitates nimium disrumpantur, conjunguntur plures aliæ stirpes ad genus idem vel ad alia omnino proxima ab Auctoribus amandata. Constat autem 20. circiter stirpibus, quarum plures europææ.

\* 1. *D. capillaceus* = Sw: musc: succ: p. 28. = Hook: et Tayl: musc: brit: p. 119. t. 20. = Brid: bryol: univ: I. p. 504. Spr: syst: IV. 172. Bals: et Denot: prodr: p. 127. Sub *Cynodontio* Hedw: sp: Sub

*Swartzia* Hedw: musc: Sub *Trichostomo* Sm: Sub *Bryo* Gmel: *Br: montanum* Oed: fl: dan: t. 1000. f. 1. aliique (*Eur: præsertim septentr: Pedem: locis alpinis et subalpinis frequentissimus* ALL: n. 2466. sub *Bryo montano*). Cæspitosus erectus sub - simplex, folia e basi amplexante subulata disticha, capsula erecta oblonga vel ovata operculo conico.

2. *D. longirostris* = Brid: bryol: univ: I. p. 512. ex Schwægr: suppl: 1. 1. p. 111. t. 29. *D. rostratus* Spr: syst: IV. 172. ex Wahlemb: (*Helvet., German., Suecia. Sardin: in sylvis Arizzo* MORIS st: sard: III. p. 14.). Plantam non vidi; habitus *Dicrani*, peristomium solum *Didymodontis* ex BRID:

\* 3. *D. pallidus* = Arn: disp: meth: p. 284. = Bals: et Denot: prodr: p. 128. = Sub *Trichostomo* Brid: bryol: univ: I. p. 489. ex Hedw: musc: I. p. 71. t. 27. Spr: syst: IV. 169. aliique. Sub *Bryo* Schreb: non With: (*Eur: passim, Asia, Amer: bor: Pedem: in sylvis della Mandria* RE fl: tor: II. p. 194. BALB: el: p. 8. In ericetis et sylvis vulgaris DENOT: mss:). Humilis simplex erectus pallide aureo - viridis, folia subulato - capillaria confertissima tenui - nervia, seta longissima, capsula erecta oblonga maturitate rutilans operculo obtuse conico.

\* 4. *D. inclinatus* = Sw: musc: suec: p. 28. = Hook: et Tayl: musc: brit: p. 114. t. 20. = Spr: syst: IV. 173. Sub *Cynodonte* Brid: bryol: univ: I. p. 501. (*Eur: bor: et med: Pedem: in alpibus vallis Coyne supra August: Prætor: DENOT: mant: n. 41.*). Erectus e basi sub-ramosus, folia alterna disticha semi-vaginantia lineari-subulata nervo apicem sub-attingente,

capsula elliptico-ovata cernua operculo oblique conico, peristomii dentes perforati.

\* 5. *D. homomallus* = Hedw: sp: p. 105. t. 23. f. 1. 2. = Brid: bryol: univ: I. p. 510. = Spr: syst: IV. 172. Bals: et Denot: prodr: p. 129. Sub *Grimmia* Smith (*Eur: passim, Amer: bor: Pedem: in collibus ad Verbanum* DENOT: mant: n. 42.). Erectus sub - simplex, folia e basi lanceolata subulata secunda pallide viridia nervo apicem attingente, capsula recta oblonga apice angustata operculo conico recto vel obliquo.

\* 6. *D. pusillus* = Hedw: sp: p. 104. = Brid: bryol: univ: I. p. 509. Spr: syst: IV. 172. Bals: et Denot: prodr: p. 128. = Sub *Trichostomo* Hedw: musc: I. p. 74. t. 28. (*Eur: bor: et med: Pedem: ad terram in arenosis vallis Intrascæ ad Verbanum* DENOT: mant: n. 43.). Vix differt a priori statura generatim *minori*, foliis basi *lterioribus* et *concavis*, capsula *ovato-oblonga*, operculo *longiore rostrato*.

\* 7. *D. Barbula* = Bals: et Denot: prodr: p. 127. = Sub *Trichostomo* Schwægr: suppl: 1. 1. p. 144. t. 36. = Spr: syst: IV. 170. *Tr: barbuloides* Brid: bryol: univ: I. p. 493. (*Hispan:, Lusitan:, Ital:, Helvet: Pedem: in collibus ad lacum Cusii* DENOT: mant: n. 44.). Erectus sub - simplex inferne nudus, folia lanceolato-acuminata siccitate convoluta nervo crasso apicem attingente, capsula erecta cylindrica luteo - fusca operculo obtuse rostrato.

\* 8. *D. glaucescens* = Web: et Mohr: bot: tasch: p. 158. = Hook: et Tayl: musc: brit: p. 116. t. 3. = Brid: bryol: univ: I. p. 513. Spr: syst: IV. 173.



Bals: et Denot: prodr: p. 126. Sub *Trichostomo* Hedw: Sub *Bryo* Dicks: (*Eur*: passim. *Pedem*: in collibus ad *Verbanum* DENOT: mss:). Differt a priori præsertim foliis squamæformibus parvis laxis apicem versus sub-serrulatis, capsula oblonga magis fusca, operculo oblique conico; ab affinibus facile distinguitur colore glaucescente.

\* 9. *D. rigidulus* = Hedw: musc: III. p. 8. t. 4. = Hook: et Tayl: musc: brit: p. 117. t. 20. = Brid: bryol: univ: I. p. 514. Spr: syst: IV. 173. Bals: et Denot: prodr: p. 126. Sub *Trichostomo* Sm: Sub *Bryo* Dicks: (*Eur*: passim. *Pedem*: in collibus ad lacum *Cusii* DENOT: mant: n. 45. Ad muros vetustos ubique vulgaris DENOT: mss:). Erectus elongatus ramosus, folia lanceolato - acuminata carinata erecto - patentia nervo rigido ad apicem producto, capsula oblonga operculo oblique rostrato. Facies *Tortulæ fallacis*, a qua peristomii statura distinguitur.

\* 10. *D. trifarius* = Sw: musc: suec: p. 28. = Hook: et Tayl: musc: brit: p. 118. t. 20. = Brid: bryol: univ: I. p. 508. Spr: syst: IV. 173. Bals: et Denot: prodr: p. 125. Sub *Swartzia* Hedw: Sub *Cynodontio* Schwægr: Sub *Trichostomo* Sm: (*Eur*: passim. *Pedem*: ad muros vetustos septentrionem spectantes laxè vel compacte cæspitosus DENOT: mant: n. 46. et mss:). Erectus sub-ramosus ramis fastigiatis, folia imbricata vel laxa ovato - lanceolata obtusiuscula carinato - subulata, capsula erecta ovata vel oblonga operculo conico rostrato. Variat summopere colore foliorum e pallido-viridi ad fuscum, peristomii dentibus rubellis vel albicantibus plus minus longis

plus minus inter se connatis etc. Cons: MONTAGNE in Arch: de botaniqu: tom: I. p. 139.

\* 11. *D. spathulatus* = Denot: mant: n. 47. = *Trichostomum latifolium* Schwægr: suppl 1. 1. p. 145. excl: syn: Schult: *Dicranum latifolium* Hedw: musc: p. 69. t. 33. = Spr: syst: IV. 168. *Desmatodon latifolius* Brid: bryol: univ: I. p. 524. (*Eur: fere tota, Amer: bor: Pedem: in alpinis supra August: Prætor: DENOT: l. c.*). Erectus simplex longiusculus, folia ovata apiculata concava superiora gradatim oblongiora nervo crasso excurrente in pilum brevem producto, capsula erecta oblonga fusco-rutilans operculo obtuse subulato.

\* 12. *D. piliferus* = Denot: mant: n. 48. = *Dicranum latifolium*  $\beta$  *piliferum* Hook: et Tayl: musc: brit: p. 92. t. 16. = *Desmatodon brevicaulis* Brid: bryol: univ: I. p. 525. (*Scotia, Helvet: Pedem: in pascuis editissimis Alpium vulgarissimus DENOT: l. c.*). Differt a priori caule *brevi*, foliorum nervo in *pilum longum* producto, operculo *longius* rostrato, peristomii dentibus profunde 2-fidis. « Variat capsula ovata » vel oblonga habitu robustiore vel fragiliore. » DENOT:

XXII. DICRANUM Schreb: gen: plant: II. p. 759. = Hook: et Tayl: musc: brit: p. 87. t. 2. = Bals: et Denot: prodr: p. 130. = Spr: syst: n. 3313. = *Dicrani* et *Fissidentis* spec: Hedw: = Brid: bryol: univ: I. p. 406. tab: IV. f. 7. pro *Dicrano* et II. p. 679. tab: X. f. 12. pro *Fissidente*.

» *Seta* terminalis (in paucis interdum *lateralis*).  
 » *Capsula* oblonga apophysi quandoque donata. *Peristom: simplex* dentibus 16. æquidistantibus. *Ca-*

» *lyptr*: dimidiata. » (BALS: et DENOT: l. c.).

*Obs*: Genus varie ab Auctoribus determinatum et divisum vel in alia genera vel in sectiones, et inde extricatu difficillimum. Retentis characteribus supra allatis, facilius evadere videtur multarum, quibus constat (60. circiter ex SPR.), stirpium perquisitio.

\* 1. *D. viridulum* = SW: musc: suec: p. 32. t. 2. f. 3. = *D. bryoides* Hook: et Tayl: musc: brit: p. 88. t. 16. excl: syn: SW: et *Fissidentis osmundioides* Spr: syst: IV. 163. = *Fissidens bryoides* Hedw: musc: III. p. 67. t. 29. *F. tamarindifolius* et *bryoides* Brid: bryol: univ: II. p. 684. 686. *Bryum viridulum* L. non All: *Hypnum bryoides* L. sp: 1588.? Dill: musc: t. 34. f. 1.? (In umbrosis humidis totius fere terrarum orbis. *Pedem*: non infrequens in collium *Taurin*: umbrosis secus semitas ALL: n. 2479. sub *Hypno bryoides*. Ad sepes, margines viarum, ripas in locis umbrosis passim DENOT: mss: *Sardin*: in campestribus udis MORIS st: sard: III. p. 14. sub *Fissidente tamarindifolio*?). Species pro synonymia obscurissima, valde varians caulibus brevissimis vel elongatis erectiusculis, foliis sæpius decemjugis vel paucijugis, capsula erecta vel inclinata etc.

\* 2. *D. taxifolium* = SW: musc: suec: p. 31. = Hook: et Tayl: musc: brit: p. 91. t. 16. = Spr: syst: IV. 164. Bals: et Denot: prodr: p. 132. Sub *Fissidente* Brid: bryol: univ: II. p. 692. ex Hedw: Sub *Hypno* L. sp: 1587. alique. Dill: musc: t. 34. f. 2. (*Eur*: fere tota, *Amer*: bor:, ins: *Mascaren*: *Pedem*: frequentissimum ubique in umbrosis ALL: n. 2477. VOL. VI. 22



RE fl: segus: p. 86. BALB: fl: taur: p. 181. BIROLI fl: acon: II. p. 161. omnes sub *Hypno*. *Sardin*: in umbrosis humidis MORIS st: sard: III. p. 14. sub *Fissidente*). A præcedenti differt statura generatim majore, ac præsertim insertione setæ quæ in illo versus medietatem vel apicem caulis innascitur, in hoc fere a radice; ceterum ei valde affine.

\* 3. *D. adiantoides* = Sw: musc: succ: p. 31. = Hook: et Tayl: musc: brit: p. 90. t. 16. = Spr: syst: IV. 164. Bals: et Denot: prodr: p. 131. Sub *Fissidente* Brid: bryol: univ: II. p. 702. ex Hedw: Sub *Hypno* L. sp: 1588. aliique. Dill: musc: t. 34. f. 3. (*Eur*: fere tota, *Amer*: bor: *Pedem*: in humidis montanis ALL: n. 2480. In pratis uliginosis di *Ornavasso* et *Piano di Fariolo* abunde BIROLI fl: acon: II. p. 161. omnes sub *Hypno*. *Sardin*: in limosis MORIS st: sard: III. p. 14. sub *Fissidente*). Simplex vel ramosum, folia sub-40-juga, setæ laterales ut plurimum supra medium vel ad apicem caulis, capsula sub-cernua operculo subulato longi-rostro.

\* 4. *D. falcatum* = Hedw: spec: p. 150. t. 32. f. 2. 7. = Hook: et Tayl: musc: brit: p. 97. t. 17. = Spr: syst: IV. 168. Sub *Oncophoro* Brid: bryol: univ: I. p. 393. (*Eur*: passim. *Pedem*: in sylvis montanis provinc: *Novariens*: DENOT: mant: n. 49.). Simpliciusculum laxe cæspitosum læte virens, folia laxa falcata secunda integra nervo valde conspicuo excurrente, capsula ovata sub-cernua basi strumosa operculo acuto sub-rostrato.

\* 5. *D. glaucum* = Sw: musc: succ: p. 35. = Hook: et Tayl: musc: brit: p. 92. t. 16. = Brid:

bryol: univ: I. p. 407. Spr: syst: IV. 165. Bals: et Denot: prodr: p. 133. Sub *Bryo* L. sp: 1582. aliique. Dill: musc: t. 46. f. 20. (*Eur: fere tota, Amer: bor:, Antillis, Tenerif: Pedem: locis humidis argillosis non infrequens ALL: n. 2459. RE fl: segus: p. 86. BIROLI fl: acon: II. p. 59. omnes sub Bryo. In uliginosis della Mandria et prope Supergam RE fl: tor: II. p. 192.*). Erectum elatum ramosum rigidum fastigiatum, folia imbricata ovato-lanceolata enervia glaucescentia, capsula ovato-oblonga cernua sub-strumosa operculo curvi-rostro.

\* 6. *D. pellucidum* = Sw: musc: suec: p. 35. = Hook: et Tayl: musc: brit: p. 98. t. 17. = Brid: bryol: univ: I. p. 439. Spr: syst: IV. 165. Sub *Bryo* L. sp: 1583. aliique. Dill: musc: t. 36. f. 23. (*In uliginosis Eur: fere totius. Pedem: in M. Cenisio, Gros-caval, Ceresole, circa Chamouny ALL: n. 2460. RE fl: segus: p. 86. sub Bryo. In pascuis ad sylvarum oras in collibus Taurinens: RE fl: tor: II. p. 192.*). Differt a priori statura generatim minore, colore læte viridi, caule hirsuto, foliis angustioribus pellucidis, nervo crasso apicem sub-attingente.

\* 7. *D. scoparium* var:  $\alpha$  majus = Hook: et Tayl: musc: brit: p. 101. t. 18. a = *D. majus* Turn: musc: Hibern: p. 58. = Spr: syst: IV. 164. *D. polysetum* Brid: bryol: univ. I. p. 413. *Bryum scoparium* L. sp: 1582. aliique. Dill: musc: t. 46. f. 18. (*Eur: fere tota. Pedem: ubique in sylvis ALL: n. 2457. RE fl: segus: p. 86. BIROLI fl: acon: II. p. 159. omnes sub Bryo. In sylvis della Mandria ad arborum radices atque in locis declivibus collium RE fl: tor: II. p.*

191. sub *Dicrano*. *Sardin*: in sylvis montanis MORIS st: sard: III. p. 13.). Erectum elatum ramosum, folia lanceolata acuminata falcato-secunda apice grosse dentata, setæ aggregatæ vel solitariæ, capsula subcylindrica curvula operculo capsulam sub-æquante longe rostrato. An a vero *D. scopario* satis distinctum?

\* ? 8. *D. Sphagni* = Wahlemb: fl: lapp: p. 337. = Brid: bryol: univ: I. p. 461. *D. elongatum* Schwægr: ? Spr: syst: IV. 164. = *D. congestum* Schwægr: suppl: 1. 1. p. 168. t. 42. Bals: et Denot: prodr: p. 136. ? *Sphagnum alpinum* L. sp: musc: 1570. (Alpib: *Eur*: septentr: *Pedem*: in scopulis locis humidis ac septentrionalibus supra *Giaveno* aliisque alpestribus locis BELLARD: addit: p. 100. In saxosis secus *il Sangone* atque in montanis *di Giaveno* RE fl: segus: p. 85. sub *Sphagno alpino*). Stirps valde dubia quam non habeo ex *Pedem*: Specim: *D. elongati* quæ posideo ex alpibus *Helveticis* videntur quadrare cum *Sphagno alpino* L. et DILL: t. 32. f. 3.

\* 9. *D. undulatum* = Turn: musc: hibern: p. 59. non Schrad: = Hook: et Tayl: musc: brit: p. 100. t. 18. = Bals: et Denot: prodr: p. 134. *D. rugosum* Brid: bryol: univ: I. p. 414. Spr: syst: IV. 164. *D. polysetum* Sw: non Brid: Dill: musc: t. 46. f. 16. (*Eur*: , *Asia* et *Amer*: bor: *Pedem*: in collibus et ad urbem *Novar*: DENOT: mant: n. 56. In ericetis humidis præsertim et ad margines rivulorum DENOT: mss: Habeo ex *Sabaud*: a PERRET). A præcedenti differt foliis latioribus brevioribusque eximie fortiterque supra medium margine carinaque serratis, nec non co-



rum superficie planiuscula siccitate transversim undulata. Variat summopere uti *D. scoparium* et *polysetum* setarum numero, foliorum forma et directione, proinde forsā melius coniungenda.

\* 10. *D. heteromallum* = Hedw: spicil: p. 68. t. 26. = Hook: et Tayl: musc: brit: p. 103. t. 18. = Brid: bryol: univ: I. 423. Spr: syst: IV. 164. Bals: et Denot: prodr: p. 136. Sub *Bryo* L. sp: 1583. alii-que. Dill: musc: t. 47. f. 37. (*Eur*: fere tota. *Pedem*: in truncis arborum locis montanis ALL: n. 2463. In sylvis vulgare DENOT: mss:). Erectum ramosiusculum, folia falcato-secunda setacea integra vel denticulata nervo in subulam protracto, capsula oblongo-ovata sub-cernua operculo rostrato.

\* 11. *D. varium* = Hedw: musc: II. p. 93. t. 34. = Brid: bryol: univ: I. p. 435. = Spr: syst: IV. 164. *D. varium* et *Schreberi* Bals: et Denot: prodr: p. 138. 139. sec: Denot: mss: *Bryum simplex* L. sp: 1587. alii-que. Dill: musc: t. 50. f. 59. (*Eur*:, *Amer*: bor:, *Guadalupa*. *Pedem*: in pascuis vulgare ALL: n. 2474. sub *Bryo simplici*. RE fl: tor: II. p. 191. *Sardin*: in solo limoso frequens MORIS st: sard: III. p. 13.). Breve sub-simplex, folia secunda lanceolata subulata plerumque integra nervo apicem sub-attin-gente, capsula ovata cernua operculo conico acumi-nato.

\* 12. *D. Schreberianum* = Hedw: musc: p. 144. t. 33. f. 6. 10. = Spr: syst: IV. 165. = Denot: mant: n. 51. *D. Schreberi* Sw: musc: suec: p. 37. 88. t. 2. f. 3. excl: syn: bryol: mediol: Brid: bryol: univ: I. p. 449. (*Eur*:, *Asia* bor:, *Afr*: austr: *Pedem*: in

alpibus supra *August: Prætor: DENOT: l. c.*). Differt a priori, cui affine, foliis e basi amplexante valde dilatata concaviuscula subito attenuato-subulatis undique patenti-reflexis integrisque, capsula strumulifera operculoque conico rostrata.

\* 13. *D. cerviculatum* = Hedw: musc: III. p. 89. t. 37. = Spr: syst: IV. 168. = *Oncophorus cerviculatus*, *pusillus*, et *flavidus* Brid: bryol: univ: I. p. 390. -91. -92. *Bryum parvulum* et *cerviculatum* Dicks: (*Eur: passim. Pedem: ad terram in sylvis editissimis montium provinc: Novar: DENOT: mant: n. 50.*). Erectum simplex plus minus breve, folia erecta vel subincurva capillaria integerrima basi quandoque latiuscula enervia, capsula sub-erecta sub-ovoidea operculo plus minus oblique et longe rostrato.

\* 14. *D. virens* = Hedw: musc: III. p. 77. t. 32. = Spr: syst: IV. 168. = Denot: mant: n. 52. Sub *Oncophoro* Brid: bryol: univ: I. p. 399. (*Eur: septentr: præsertim. Pedem: in sylvis alpium provinc: Novar: DENOT: l. c.*). Erectum ramosum, folia e basi vaginante lineari-subulata margine denticulata recurva siccitate crispescentia læte virentia, capsula ovato-oblonga cernua basi strumulosa operculo curvi-rostro.

\* 15. *D. mixtum* = Denot: mant: n. 53. (In sylvis montium editiorum prov: *Novar: ad detrita vegetabilium DENOT: l. c.*). « Fructus fere *D. polycarpi*, » a quo differt operculo foliisque minime subulatis; a » *D. pellucido*, *flavescente* et *strumifero*, ceteris omis- » sis, capsulæ forma et structura recedit; plurimis » notis convenit cum *D. Vahlebergii*, ast malui- » mus plantam proprio nomine insignire quam spe-

» ciei nobis ignotæ et forte ob capsulam strumiferam  
» valde diversæ adscribere. » DENOT:

\* 16. *D. strictum* = Schwægr: suppl: I. I. p. 188.  
t. 43. = Brid: bryol: univ: I. p. 459. = Denot: mant:  
n. 54. *D. montanum* Spr: syst: IV. 167. ex Hedw:  
male (In sylvis supra *Moriles Valesiæ* BRID: I. c.  
*Pedem*: in sylvis montanis prov: *Novar*: DENOT: I. c.).  
Erectum fastigiato-ramosum, folia erecta lanceolato-  
acuminata rigida apice sub-denticulata nervo conti-  
nuo, capsula cylindrica recta lævis operculo conco-  
lore e convexo subulato rectiuscula. Perperam confu-  
sum a SPR: cum *D. montano* HEDW:; in hoc folia in-  
tegerrima, capsula oblonga cernua, operculum rubrum  
conicum rostellatum.

\* 17. *D. flagellare* = Hedw: musc: III. p. 1. t. 1.  
f. 1. = Brid: bryol: univ: I. p. 422. = Spr: syst: IV.  
166. Denot: mant: n. 55. (*Eur*: passim, *Amer*: bor:,  
*Teneriffa*. *Pedem*: in sylvis montanis prov: *Novar*:  
præsertim fagineis vulgatissimum DENOT: I. c.). Ere-  
ctum flexuosum ramoso-flagelliforme, folia lineari-  
subulata secunda sub-falcata evanidi-nervia, capsula  
erecta cylindrica operculo longi-rostro.

\* 18. *D. longifolium* = Hedw: musc: III. p. 24.  
t. 9. = Brid: bryol: univ: I. p. 430. = Spr: syst:  
IV. 166. Bals: et Denot: prodr: p. 133. (*Eur*:, *Amer*:  
bor: *Pedem*: ex BALB: el: p. 4.): Erectum sub-simplex,  
folia canaliculato-capillaria longissima tenerrima ser-  
rulata nervo lato obsoleto, capsula cylindrica recta  
operculo rostrato capsulam sub-æquante.



XXIII. COSCINODON Denot: mss: = *Weissia* sp: Auctor:  
= *Desmanodontis* et *Anacalyptæ* spec: Hübner: =  
*Desmanodontis*, *Coscinodontis* et *Ceratodontis* spec:  
Brid:

» *Seta* terminalis. *Peristom*: simplex dentibus 16.  
» longitudinaliter perforatis vel 2-partitis cruribus hinc  
» inde trabeculis connexis, senio tandem ut pluri-  
» mum diffractis liberis. *Caps*: exapophysata. *Calyptr*:  
» dimidiata. »

*Obs*: Genus ex Auctoribus valde obscurum ludens  
præsertim inter *Didymodontem* et *Weissiam*, demum  
a DENOT: characteribus supra allatis satis determi-  
natum.

\* 1. *C. lanceolatus* = Brid: bryol: univ: I. p. 372.  
= Sub *Weissia* Hook: et Tayl: musc: brit: p. 80. t.  
14. = Spr: syst: IV. 155. Sub *Didymodonte* Bals: et  
Denot: prodr: p. 122. (*Eur*: passim. *Pedem*: prope  
vineam *Reginæ* ad lapides RE fl: tor: II. p. 191. In  
pascuis apricis frequenter occurrit, sic et ad margi-  
nes viarum DENOT: mss:). Erectus sub-divisus, folia  
lanceolata e nervo valido ultra apicem producto pili-  
fera, capsula elliptica opereculo conico rostrato in-  
curvo, peristomii dentes in crura filiformia bipartiti  
reflexiles.

\* 2. *C. nervosus* = Denot: mss: = Sub *Didymo-*  
*donte* Hook: et Tayl: musc: brit: p. 115. t. 20. =  
Brid: bryol: univ: I. p. 516. Spr: syst: IV. 173. Bals:  
et Denot: prodr: p. 123. *Grimmia atrovirens* Sm:  
(*Anglia*, *Ital*: *Pedem*: in argillosis et ad muros me-  
ridiem versus DENOT: mss: Habeo plura specim: ex

*Sardin:* a DENOT: sub vero nomine et a MORISIO sub *Weissia Starkeana* st: sard: III. p. 16., quæ omnia perfecte quadrant). Brevissimus cæspitosus, folia imbricata sub-rosulata obovata integra margine revoluta nervo valido versus apicem incrassato, capsula elliptica vel oblonga maturitate fusca operculo conico acuminato, dentes læte rubri usque ad basim partiti cruribus hinc inde connexis tandem liberis. Variat statura dimidio minore et tunc folia ei sunt latiora.

\* 3. *C. purpureus* = Denot: mss: = Sub *Didymodonte* Hook: et Tayl: musc: brit: p. 113. t. 20. = Spr: syst: IV. 173. Bals: et Denot: prodr: p. 124. Sub *Ceratodonte* Brid: bryol: univ: I. p. 480. Sub *Dicrano* Sw: musc: suæc: p. 36. aliique. Sub *Mnio* L. sp: 1575. Sub *Bryo* Neck: meth: musc: p. 211. Dill: musc: t. 49. f. 51. (*Eur:* fere tota, *Asia* et *Amer:* bor: *Pedem:* in sylvis umbrosis ALL: n. 2440. sub *Mnio*. In sylvis *Caburetti* ad terram RE fl: tor: II. p. 192. sub *Dicrano*. In ericetis et in pascuis sterilibus montium et in sylvis vulgaris DENOT: mss: *Sardin:* ad rupes montanas *Genargentu* MORIS st: sard: III. p. 13. sub *Ceratodonte*). Erectus dichotomo-subramosus, folia lanceolato-linearibus erecto-patula inferiora rubella superiora viridia nervo purpureo apicem sub-attingente, capsula oblonga cernua tandem sulcata operculo conico incurviusculo brevi. Stirps polymorpha.

\* 4. *C. verticillatus* = Brid: bryol: univ: I. p. 374. = Sub *Weissia* Hook: et Tayl: musc: brit: p. 86. t. 15. = Spr: syst: IV. 157. Bals: et Denot: prodr: p. 142. Sub *Grimmia* Turn: aliique. Sub *Bryo*

L. sp: 1525. aliiq. Dill: musc: t. 47. f. 35. (*Eur:* fere tota, *Asia* min: *Pedem:* ad rupes madentes in alpi-  
bus passim DENOT: mant: n. 58. *Sardin:* in pascuis montanis udis *Arizzo* MORIS st: sard: III. p. 13.).  
Compacte cæspitosus glaucescens, folia lanceolato-subulata verticillato-fasciculata nervo crasso continuo, capsula oblongo-ovata operculo curvi-rostro. « Planta » sæpe incrustata et tunc fragilis evadit. » DENOT:

\* 5. *C. latifolius* = Denot: mant: n. 57. = Sub *Weissia* Schwægr: suppl: 1. 1. p. 64. t. 18. = Brid: bryol: univ: I. p. 356. Spr: syst: IV. 155. Sub *Grimmia* Web: et Mohr: (*Alpi:* *Noric:* *Pedem:* in alpi-  
bus *Penninis* DENOT: l. c.). Brevissimus simplex, folia conniventi-imbricata obtusiuscula ovata vel cordata nervo valido versus apicem evanescente, capsula oblonga sub-cernua operculo e convexa basi longe et oblique rostrato.

XXIV. *WEISSIA* Denot: mss: = *Veissia* spec: quorund:

» *Peristom:* dentes erecti integri imperforative æ-  
» quidistantes. Cetera *Coscinodontis*. »

*Obs:* Genus vix a priori distinctum characteribus allatis.

\* 1. *W. recurvirostra* = Hedw: musc: I. p. 19. t. 7. excl: syn: Brid: = Spr: syst: IV. 156. = *W. curvirostra* Brid: bryol: univ: I. p. 347. Bals: et Denot. prodr: p. 141. Sub *Grimmia* Sm: (*Eur:* passim. *Pedem:* vulgatissima in montanis ad terram, viarum margines, muros agrorum etc. DENOT: mant: n. 61.). Erecta ramosa, folia lanceolato-subulata carinata integra solidinervia patentia inferiora rutilantia superiora



fusca viridia, capsula cylindrica operculo calyptra tuto recto calyptra omissa sæpius recurvo, peristomii dentes conniventes imperforati.

\* 2. *W. cirrhata* = Hedw: spec: p. 69. t. 12. f. 7. 12. = Brid: bryol: univ: I. p. 343. = Spr: syst: IV. 158. Bals: et Denot: prodr: p. 142. Sub *Mnio* L. sp: 1576. aliique. Sub *Bryo* Gmel: Dill: musc: t. 48. f. 42. (*Eur*: fere tota. *Pedem*: locis umbrosis et ad sepes in montanis ALL: n. 2443. In declivibus *Ticini* locis umbrosis versus *Cerano* BIROLI fl: acon: II. p. 156. omnes sub *Mnio*. Sub *Weissia* BALB: el: p. 9.). Erecta fastigiato-ramosa, folia lanceolata acuminata marginibus sub-reflexis nervo ad apicem producto siccitate crispatissima, capsula oblonga operculo e basi convexa in rostellum filiforme rectum vel obliquum protenso, peristomii dentes imperforati.

\* 3. *W. crispula* = Hedw: spec: p. 68. t. 12. f. 1. 6. = Brid: bryol: univ: I. p. 346. = Spr: syst: IV. 158. Sub *Grimmia* Sm: aliique (*Eur*: fere tota, *Asia* bor: *Pedem*: in alpibus BALB: el: p. 9. DENOT: mss: *Sardin*: in humidis sylvarum *Arizzo* MORIS st: sard: III. p. 16.). Differt a priori, cui valde affinis, statura quidquam majore, foliis e basi lata lanceolatis subulatis sub-canaliculatis, capsula ovato-elliptica, operculo oblique breviusque rostrato.

\* 4. *W. controversa* = Hedw: musc: III. p. 12. t. 5. = Spr: syst: IV. 158. = Bals: et Denot: prodr: p. 140. *W. viridula* Brid: bryol: univ: I. p. 334. aliique. *Bryum viridulum* L. sp: 1584. Dill: musc: t. 48. f. 43. (*Eur*: , *Amer*: bor: , *Cochinchina* , *C. B. S.* *Pedem*: in terra ad ageres frequens ALL: n. 2467.

sub *Bryo viridulo*. *Alla scuola degli Artiglieri* et in locis umbrosis RE fl: tor: II. p. 190. sub *W. viridula*. BALE: el: p. 9. sub *W. controversa*. *Sardin:* in pascuis et in sylvis frequens MORIS st: sard: III. p. 16. sub *W. viridula*). Variat statura, setis nunc pallidis flavicantibus nunc rutilis, capsulis fuscis vel badiis ovatis vel ellipticis, dentibus peristomii plus minus validis pallidis vel saturate rubris; ceterum ab affinis foliis lineari-subulatis sub-canaliculatis siccitate valde tortilibus, operculo e basi convexa in rostrum tenue capsulæ minus varieque curvatum producto, cauleque brevi sub-simplici facile distinguitur.

5. *W. Starkeana* = Denot: mss: *W. Starkeana* Hedw: musc: III. p. 83. t. 34. et *W. affinis* Hook: et Tayl: musc: brit: p. 79. t. 14. Brid: bryol: univ: I. p. 353. 354. (*Eur:* passim. *Sardin:* in pascuis humidis et in sylvis pro *W. Starkeana*, in saxosis collinis pro *W. affini* MORIS st: sard: III. p. 16.). Plantulæ minimæ gregarie crescentes sub-acaulæ, folia laxa flaccida oblongo-lanceolata vel sub-spathulata margine plana vel inflexa nervo excurrente, capsula ovata oblongave operculo conico, dentes lineares longiusculi obtusi membranacei fugaces. « Comparatis *W. affinis* et *Starkeanæ* quamplurimis specim:, hasce » duas species minime diversas esse animadvertimus. »  
DENOT: mss:

❖ 6. *W. nigrita* = Hedw: musc: III. p. 97. t. 39. = Spr: syst: IV. 156. = Sub *Caroscopio* Brid: bryol: univ: I. p. 368. Sub *Bryo* Dicks: (*Eur:* alpi: *Pedem:* in alpiibus supra *August: Prætor:* DENOT: mant: n. 59.). Erecta sub-divisa, folia ovato-acuminata con-

ferta concava inferiora nigro-virescentia superiora lutescenti-viridia nervo crassiusculo continuo, capsula sphaeroidea cernua operculo convexo brevi-acuminato.

\* 7. *W. acuta* = Hedw: musc: III. p. 85. t. 35. = Brid: bryol: univ: I. p. 362. = Spr: syst: IV. 157. Sub *Grimmia* Sm: Sub *Bryo* Dicks: Dill: musc: t. 47. f. 34. (*Eur*: passim. *Pedem*: ad rupes humidias in alpibus frequentissima DENOT: mant: n. 60.). Erecta ramosa, folia lineari-subulata erecta integerrima e luteo viridia nervo lato apicem attingente, hinc in subulam protracto, capsula oblongo-ovata erecta operculo e basi sub-conica in cuspidem protenso. Variat habitu grandiore, capsula sub-rotunda, setis longioribus arcuatis etc.

\* 8. *W. cylindrica* = Brid: bryol: univ: I. p. 806. = Ic: ? (Prope *Bipontium* BRID: l. c. *Pedem*: in umbris humidis ad lacum *Cusii* DENOT: mant: n. 62.). Erecta ramosa, folia lineari-lanceolata acuta, capsula erecta angusto-cylindrica operculo oblique rostrato, peristomii dentes lineares obsolete trabeculati sub-nodulosi unicolores. Affinem *W. crispulæ* n. 3. asserit esse cl: BRID: Omissa a SPR:

\* 9. *W. pusilla* = Hedw: musc: II. p. 78. t. 29. = Brid: bryol: univ: I. p. 349. = Spr: syst: IV. 157. Sub *Grimmia* Sm: *Weissia paludosa* Brid: musc: *Bryum paludosum* L. sp: 1584. Dill: musc: t. 44. f. 53. (*Eur*: med: *Pedem*: loca montana incolit tegitque lapides aqua madentes ALL: n. 2468. sub *Bryo paludoso*? Ad saxa in collibus ad *Verbanum* DENOT: mant: n. 63.). Omnium minutissima vix 1/2 lib: longa simplicissima, folia conferta capillaria enervia,



capsula recta ovata operculo oblique rostrato. « Ve-  
 » reor ne planta sub hoc nomine in Flora Pedem:  
 » pertineat ad var: minorem *W. acutæ* quæ revera  
 » in montanis locis rupes aqua madentes huic rupes  
 » calcareas incolenti anteposit DENOT: l. c. »

\* 10. *W. fugax* = Hedw: spec: p. 64. t. 13. f.  
 5. 10. = Brid: bryol: univ: I. p. 340. = Spr: syst:  
 IV. 157. (*Eur: med: Pedem: ad rupes editissimas*  
*montium prov: Novar: DENOT: mant: n. 64.*). Bre-  
 viuscula erecta sub-ramosa, folia linearia acutiuscula  
 carinata saturate viridia nervo tenuissimo, capsula  
 obovata tandem profunde striata operculo e basi co-  
 nica longe et oblique rostellato.

\* 11. *W. compacta* = Schwægr: suppl: 1. 1. p.  
 74. = Brid: bryol: univ: I. p. 345. Spr: syst: IV.  
 156. = Ic: ? (*Helvet:, German: alpib: Pedem: ad ru-*  
*pes editiores M. Sempronii Italiam versus DENOT:*  
*mant: n. 65.*). Erecta ramis fastigiatis condensatis,  
 folia conferta erecta lanceolato-subulata nervo colo-  
 rato crasso continuo, capsula ovato-oblonga erecta  
 operculo e basi convexo-conica curvi-rostro capsula  
 paullo dilutius colorato.

## Trib: VI.

## CAMPYLOPEÆ

Bals: et Denot: prodr: p. 144.

XXV. CAMPYLOPUS Brid: mant: musc: p. 71. et bryol: univ: l. p. 468. tab: IV. f. 8. = *Dicrani*, *Thysanomitrontis*, *Bryi* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis flexuosa. *Peristom*: simplex den-  
 » tibus 16. 2 - fidis imperforatis cruribus æqualibus.  
 » *Calyptra* mitræformis basi ciliato-fimbriata vel la-  
 » ciniata. »

*Obs*: Genus characteribus allatis et præsertim seta flexuosa satis ab affinibus distinctum, constans 10. circiter stirpibus, inter quas 2-3. tantum europææ.

\* 1. *C. flexuosus* = Brid: l. c. p. 469. = Sub *Dicrano* Hedw: spec: p. 146. t. 38. f. 1. 6. = Spr: syst: IV. 166. Sub *Thesanomitronte* Bals: et Denot: prodr: p. 144. Sub *Bryo* L. sp: 1583. aliiq: Dill: musc: t. 47. f. 33. F. G. (*Eur*: fere tota. *Pedem*: supra *Lemie* in sylvis umbrosis obviam venit ALL: n. 2462. sub *Bryo*). Erectus parce ramosus, folia lanceolato-subulata integra canaliculata erecta rigidiuscula superiora longiora nonnumquam flexuosa nervo latissimo, capsula ovato-elliptica striata operculo e basi conica subulato-rostrato.

\* 2. *C. longipilus* = Brid: l. c. p. 477. = Denot: mant: n. 66. = *Dicranum flexuosum* γ *piliferum* Turn:

musc: lib: p. 74. t. 5. f. 2. *Thesanomitrium flexuosum*  $\beta$  Bals: et Denot: prodr: p. 145. (*Eur: austr: Pedem: in locis montanis aridis ad terram vulgaris sed plerumque sterilis* DENOT: l. c.).  $\Delta$  priori prima facie distinguitur præsertim caule *fastigiato - ramoso*, foliis *densissime imbricatis* apice in *pilum longum serulatum* productis, sæpius *nigrescentibus*; fructum non vidi. Omissus a SPR:

## Trib: VII.

## GRIMMOIDEÆ

Arn: disp: meth: p. 267.

XXVI. ENCALYPTA Schreb: gen: pl: II. p. 759. = Brid: bryol: univ: I. p. 138. tab: II. f. 1. = Spr: syst: n. 3304. = *Bryi*, *Mnii*, *Leersiae* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

- » *Seta* terminalis. *Peristom*: simplex dentibus 16.
- » angustis erectiusculis integris æquidistantibus fugacibus.
- » *Calyptr*: magna cylindrico-campanulata lævis
- » capsula longior basi integra vel fimbriata. »

*Obs*: Genus ob magnitudinem calyptræ totam capsulam involventis distinctissimum, constans 6. circiter stirpibus europæis.

\* 1. *E. vulgaris* = Hedw: sp: p. 60. = Hook: et Tayl: musc: brit: p. 62. t. 13. = Brid: bryol: univ: I. p. 139. Spr: syst: IV. 152. Bals: et Denot: prodr: p. 145. Sub *Leersia* Hedw: musc: I. p. 46. t. 18. *Bryum eximitorium* L. sp: 1581. alique. Dill: musc:



t. 45. f. 8. (*Eur*: fere tota, *Asia* septentr., *Amer*: bor: *Pedem*: in arenosis sub-humidis ad rupes et muros ex lapidibus sine glutine constructos ALL: n. 2453. sub *Bryo extinctorio*. In pascuis saxosis macilentis della *Molinetta* ac ad muros propugnaculorum inter portam novam et arcem RE fl: tor: II. p. 189. sub *Encalypta vulgari*. *Sardin*: ad rupes et in pascuis montanis MORIS st: sard: III. p. 14.). Erecta sub-simplex, folia spathulato-lanceolata nervo crasso continuo rubicundo, capsula cylindrica lævis operculo recto acuminato, calyptra basi integra, peristomii dentes minimi fugacissimi.

\* 2. *E. ciliata* = Hedw: sp: p. 61. = Hook: et Tayl: musc: brit: p. 63. t. 13. = Spr: syst: IV. 152. Bals: et Denot: prodr: p. 147. *E. fimbriata* Brid: bryol: univ: I. p. 145. *Bryum ciliare* Gmel: aliiue. *Br: extinctorium* β L. sp: 1581. Dill: musc: t. 45. f. 9. (*Eur*: cum priore sed minus frequens. *Pedem*: iisdem locis ac præcedens sed minus frequens BALB: fl: taur: p. 179. sub *Bryo ciliare*. In sylvaticis montanis RE fl: tor: II. p. 189. sub *E. fimbriata*). Differt a priori caule sæpius ramoso, calyptra basi *fimbriata*, peristomii dentibus *persistentibus*, operculo acumine *breviore*.

\* 3. *E. lacera* = Denot: mant: n. 67. (*Pedem*: in alpihus supra *Rejne* regione nivali superata DENOT: l. c.). « Ab *E. ciliata* differt dentium peristomii defectu, a *vulgari* calyptræ structura. » DENOT: l. c.

\* 4. *E. apophysata* = Nees: et Hornsch: bryol: germ: II. p. 49. t. 15. f. 5. sec: Denot: mant: n. 68. (Ad rupes in montibus prov: *Novar*: DENOT: l. c.).

XXVII. CINCLIDOTUS P. de Beauv: prodr: p. 28. = Brid: bryol: univ: I. p. 228. tab: II. f. 10. = Spr: syst: n. 3322. (Inter *Acrocarpos peristomos* Brid: ).

» *Seta* terminalis. *Peristom*: simplex dentibus 32.  
 » ( 16. 2-3-4-fidis BRID: ) filiformibus contortis basi  
 » anastomosanti-cancellatis. *Calyptr*: mitræformis basi  
 » irregulariter fissa. »

*Obs*: Genus constans sola stirpe seq:

\* 1. *C. fontinaloides* = P. de Beauv: l. c. = Hook: et Tayl: musc: brit: p. 51. t. 11. = Brid: bryol: univ: I. p. 229. Spr: syst: IV. 181. Bals: et Denot: prodr: p. 148. Sub *Trichostomo* Hedw: aliique. Sub *Hypno* Lam: *Fontinalis minor* L. sp: 1572. aliique. Dill: musc: t. 33. f. 2. (*Eur*: fere tota. *Pedem*: secus *Padum* loco dicto *il Po morto* ALL: n. 2512. sub *Fontinali minori*. Vulgaris præsertim ad parietes rivulorum et aquæductuum, nec non ad palos in aquis fluentibus DENOT: mss: ). Elongatus ramosus decumbens fluitans, folia imbricata oblongo-lanceolata integra nervo continuo, seta brevissima, capsula perichætio sub-immersa ovata lævis operculo oblongo-conico.

XXVIII. TRICHOSTOMUM Hook: et Tayl: musc: brit: p. 59. t. 2. = Spr: syst: n. 3315. pro majori parte = *Trichostomi* pluriumque aliorum generum spec: Brid: et Auctor:

» *Seta* terminalis. *Peristom*: simplex dentibus longiusculis subulatis 16. æqualibus basi divisus aut 32.  
 » per paria approximalis. *Calyptr*: mitræformis. »

*Obs*: Genus parum naturale, inter affinia summo-

pere ludens, hinc ab Auctoribus varie divisum, constans ex SPR: stirpibus 23., quarum dimidia pars et ultra europæa.

\* 1. *Tr: canescens* = Hedw: musc: III. p. 5. t. 3. = Spr: syst: IV. 170. = Bals: et Denot: prodr: p. 150. excl: *Tr: ericoideo*. Sub *Racomitrio* Brid: bryol: univ: I. p. 208. *Bryum hypnoides*  $\beta$  L. sp: 1585. Dill: musc: t. 47. f. 27. (*Eur: passim, Afr: bor: Pedem: frequens in umbrosis ab arce Exilles ascendendo jugum Assiette in valle di Locana ALL: n. 2469. sub Bryo hypnoideo? Sicca et arenosa loca habitare solet præsertim secus torrentes RE fl: segus: p. 86. sub eod: Secus Sturam locis arenosis siccis ac in collibus quoque reperitur BALB: fl: taur: p. 180. sub eod: In sabulosis prope il Parco RE fl: tor: II. p. 194. sub Racomitrio. In glareosis Ticini abundat BIROLI fl: acon: II. p. 160. sub Bryo hypnoideo. Bryum canescens BALB: el: p. 4.? Sardin: in saxosis montanis apricis MORIS st: sard: III. p. 16. sub Racomitrio). Erectiusculum ramosum, folia conferta ovato-lanceolata apice sub-dentata diaphana quo fit ut tota planta canescat nervo tenuissimo usque ad productionem canum continuatum, capsula erecta ovato-oblonga operculo subulato capsulam æquante.*

\* 2. *Tr: ericoides* = Schwægr: suppl: 1. 1. p. 147. t. 28. = Spr: syst: IV. 170. = *Tr: canescens* in parte Bals: et Denot: prodr: p. 151. Sub *Racomitrio* Brid: bryol: univ: I. p. 210. Sub *Bryo* Dicks: *Br: hypnoides*  $\gamma$  L. sp: 1585. Dill: musc: t. 47. f. 31. (*Eur: passim. Pedem: BALB: el: p. 8. In montibus provinc: Novar: DENOT: mss:). A prioribus distinguitur caule*



ut plurimum longiore, ramis brevibus confertis, foliis recurvis apice vix canescentibus minute serrulatis.

\* 3. *Tr: lanuginosum* = Hedw: musc: III. p. 3. t. 2. = Spr: syst: IV. 170. = Sub *Racomitrio* Brid: bryol: univ: I. p. 215. Sub *Bryo* Hoffm: *Br: hypnoides* α L. sp: 1584. (*Eur: passim. Pedem: habeo ex hb: BIROLI commixtum cum Tr: canescente sub Bryo hypnoideo*). Caule procumbente alternatim sub - pinatim ramoso, foliis longe acuminatis fortiter serratis apice non tantum sed margine etiam cano-diaphanis facile dignoscitur a præcedentibus cum quibus sæpe confusum. Ad hoc speciatim refert BRID: *Bryum hypnoideum* ALL: Quidquid sit de valore harumce stirpium, certum est sæpe commixtas occurrere in *Pedem:*

\* 4. *Tr: heterostichum* = Hedw: musc: II. p. 70. t. 25. = Spr: syst: IV. 170. = *Racomitrium heterostichum* et *Alopecurum* Brid: bryol: univ: I. p. 214. 215. Sub *Bryo* Hoffm: Dill: musc: t. 47. f. 27. A et F G sec: Hook: et Brid: (*Eur: passim. Pedem: var: α ad saxa in alpiibus, var: β ad saxa et in ericetis vallis Intrasca ad Verbanum* DENOT: mant: n. 69.). Ramosum erectiusculum vel decumbens, folia lanceolata sub - secunda apice cana sub - denticulata nervo sub - continuo, capsula ovato-oblonga operculo conico. Var: α (*R. Alopecurum* BRID:) gaudet caule procumbente, ramis brevioribus, foliis vix serrulatis, capsula oblongo - elliptica. « Peristomii dentes tum in specie » cum in varietate longiusculi nec brevissimi sicuti » habet BRID: l. c. » DENOT: mss:

\* 5. *Tr: fasciculare* = Schrad: sp: fl: germ: p. 61. = Schwægr: suppl: 1. 1. p. 155. t. 38. = Spr: syst:

IV. 171. Sub *Racomitrio* Brid: bryol: univ: I. p. 218. Sub *Bryo* Hoffm: *Br: hypnoides*  $\beta$  L. sp: ed: Reich: IV. p. 477. sec: Brid: (*Eur: montibus passim, Asia septentr: Pedem: ad rupes in alpibus* DENOT: mant: n. 70.). Procumbens ramosum ramis brevibus confertis, folia imbricata lanceolato - acuminata margine revoluta lutescentia apice concoloria nervo lato subcontinuo, capsula oblonga operculo conico longe acuminato capsulam sub-æquante.

\* 6. *Tr: polyphyllum* = Schwægr: suppl: 1. 1. p. 153. t. 39. = Spr: syst: IV. 171. = Bals: et Denot: prodr: p. 149. Sub *Racomitrio* Brid: bryol: univ: I. p. 225. Sub *Dicrano* Sm: Sub *Bryo* Dicks: Dill: musc: t. 48. f. 41. (*Eur: med: et austr:, Amer: bor:, C. B. S. Pedem: vulgatissimum ad saxa in collibus et montibus speciatim prov: Novar: DENOT: mant: n. 72.*). Inter congenera caule elongato ramoso sub-fastigiato, foliis saturate viridibus vel nigricantibus fortiter serratis concoloribus, capsulaque oblonga leviter distinctum.

\* 7. *Tr: protensum* = Duby bot: gall: p. 573. = Denot: mant: n. 71. *Racomitrium cataractarum* Brid: bryol: musc: I. p. 776. = Ic: ? (In *Hercynia Suevica* ad cataractas rivulosque BRID: l. c. *Pedem: ad rupes in valle Intrasca ad Verbanum* DENOT: l. c.). *Tr: fasciculari* n. 5. valde affine, sed differt habitu non fasciculato sed sub-fastigiato, foliisque ovato-lanceolatis obtusiusculis nec acuminatis. Omissum a SPR:

8. *Tr: riparium* = Schwægr: suppl: 1. 1. p. 158. t. 39. Spr: syst: IV. 171. Sub *Racomitrio* Brid: bryol: univ: I. p. 223. (Ad flumina et rivulos *German: austr:, Helvet: Sardin: in montanis humidis*

MORIS st: sard: III. p. 16. sub *Racomitrio*). Stricte ramosum flaccidum, folia oblongo-ovata obtusa nervo crasso continuo, seta incrassata brevis, capsula oblongo-ovata operculo conico rostrato. = 9. *Tr: microparpon* = Hedw: spec: p. 112. t. 23. f. 1. 5. Spr: syst: IV. 171. Sub *Racomitrio* Brid: bryol: univ: I. p. 211. (*Eur: passim. Sardin: ad saxa madida MORIS st: sard: III. p. 16. sub Racomitio*). Sub-erectum ramosum, folia lanceolata angusta obsolete striata apice brevi cano nervo sub-continuo, seta brevissima, capsula sub-rotunda parvula operculo conico acuminato.

XXIX. GRIMMIA Schreb: gen: pl: II. p. 759. = Hook: et Tayl: musc: brit: p. 64. t. 2. = Brid: bryol: univ: I. p. 160. tab: II. f. 6. = *Trichostomi*, *Bryi* aliorumq: generum spec: nonnullæ Auctor: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Peristom*: simplex dentibus 16.  
 » erectis vel reflexis solitariis pyramidatis æquidistan-  
 » tibus integris vel perforatis. *Calyptr*: mitræformis  
 » basi integra vel sub-lacera. »

*Obs*: Dentes peristomii regulares solitarii pyramidati distinguunt præsertim a præcedenti genus hocce habitum fere proprium etiam exhibens; ex seta exserta arcuata vel recta, aut foliis sub-immersa optimæ stirpium (20. circiter) sectiones eruuntur.

#### 1. *Seta sub-immersa.*

\* 1. *Gr: apocarpa* = Hedw: musc: I. p. 104. t. 39. = Brid: bryol: univ: I. p. 167. = Spr: syst: IV.



153. Bals: et Denot: prodr: p. 155. Sub *Bryo* L. sp: 1579. aliique. Dill: musc: t. 32. f. 4. (*Eur: fere tota, Asia min: Amer: bor:, ins: Melville. Pedem: in saxosis montanis frequens* ALL: n. 2449. sub *Bryo*. RE fl: segus: p. 86. sub cod: et fl: tor: II. p. 189. sub *Grimmia*. BIROLI fl: acon: II. p. 158. sub *Bryo*. *Sardin: in rupestribus montanis humidis* MORIS st: sard: III. p. 14.). Erecta ramosa, folia lanceolata integerrima nervo valido, capsula immersa sub-sessilis ovata operculo convexo sub-rostrato. Stirps valde polymorpha ludens foliis apice canis vel concoloribus, fuscis atris vel virescentibus, caule elongato gracili vel brevi compacto cæspitoso. Huc spectant *Gr: rivularis, gracilis, stricta, strigosa* BRID:, *alpina* SW:, et *helvetica* SCHK:

\* 2. *Gr: crinita* = Brid: bryol: univ: I. p. 163. non Bals: et Denot: = Schwægr: suppl: 1. 1. p. 92. t. 26. = Spr: syst: IV. 153. Denot: mant: n. 73. *Gymnostomum decipiens* Web: et Mohr: bot: tasch: p. 179. (*Eur: med: et austr: Pedem: ad muros vetustos meridiem versus* DENOT: l. c. *Sardin: ad rupes Sinay* MORIS st: sard: III. p. 14.). A congeneribus dignoscitur caulibus brevibus sub-simplicibus compacte cæspitosis, foliis præsertim perichætialibus longe piliferis ut cæspites omnino canescentes videantur, capsula parum exserta, peristomii dentibus perforato-cribrosis, quandoque etiam per ætatem 2-3-fidis.

\* 3. *Gr: capillata* = Denot: mant: n. 74. (*Pedem: cum priori* DENOT: l. c.). « Priori affinissima, sed se- » paranda ob caules innovando elongatos sub-dicho- » tome ramosos, foliisque caulinis ramisque omnino

» concoloribus, calyptra etiam ad capsulas juniores  
» latere fissas late cuculliformi basi integra. » DENOT: l. c.

\* 4. *Gr: longicaulis* = Denot: mss: *Gr: arcuata*  
Denot: mant: n. 78. = *Trichostomum patens* Schwægr:  
suppl: 1. 1. p. 151. t. 37. = Spr: syst: IV. 171.  
*Dryptodon patens* Brid: bryol: univ: I. p. 192. *Dicranum patens* Sm: *Bryum patens* Dicks: (Alpib: *Eur: Pedem:* ad rupes humidus in montibus editioribus vulgaris DENOT: ll. cc. *Sardin:* ad rupes madidas in montanis MORIS st: sard: III. p. 14. sub *Dryptodonte patente*). Elongata adscendens parce ramosa, folia lanceolata acuminata margine reflexa integra superiora apice diaphana, seta tenuis flexuosa curvata, capsula sub-immersa ovata sulcata operculo conico rostrato, peristomii dentes plerumque 2-3-fidi quandoque integri rubri solidi latiusculi.

\* 5. *Gr: funalis* = Denot: mant: n. 79. = Sub *Trichostomo* Schwægr: suppl: 1. 1. p. 150. t. 37. = *Tr: patens* var: Spr: syst: IV. 171. Sub *Dryptodonte* Brid: bryol: univ: I. 193. (*Helvet:*, *Gallia austr: Pedem:* ad saxa in valle *Intrasca* DENOT: l. c.). Vix differt a priori caule *procumbente*, ramis *fasciculatis*, foliis *piliferis*, operculo *obtusum*.

## 2. *Seta exserta arcuata.*

\* 6. *Gr: pulvinata* = Hook: et Tayl: musc: brit: p. 68. t. 13. = Spr: syst: IV. 154. = Bals: et Denot: prodr: p. 152. Sub *Dryptodonte* Brid: bryol: univ: I. p. 196. Sub *Bryo* L. sp: 1586. alii que. Dill: musc:

t. 50. f. 65. (*Eur: passim, Asia min:; C. B. S. Pedem: muros atque rupes inhabitat* All: n. 2476. sub *Bryo*. RE fl: segus: p. 86. sub cod: et fl: tor: II. p. 193. sub *Campylopo*. BIROLI fl: acon: II. p. 160. sub *Bryo. Sardin: ad rupes saxa murosque* MORIS st: sard: II. p. 14. sub *Dryptodonte*). Cæspitibus pulvinatis canescentibus, setis capsulam ellipticam nondum maturam inflexis inter folia recondentibus facile dignoscitur. Stirps vulgarissima.

\* 7. *Gr: africana* = Arn: disp: meth: p. 269. = Bals: et Denot: prodr: p. 151. et mant: n. 77. = *Fissidens pulvinatus*  $\beta$  *africanus* Hedw: sp: p. 159. t. 40. f. 4. 6. *Dryptodon cribrosus* Brid: bryol: univ: I. p. 198. ? (*Eur: austr: Pedem: ad muros ubi Gr: pulvinata delectatur* DENOT: mant: l. c.). Distinguitur præsertim a præcedente capsula *sub-rotunda*, peristomio foraminibus pluribus *pertuso*, statura generatim *maiore ac robustiore*. Omissa a Spr: et forsan confusa cum *pulvinata*.

8. *Gr: tricophylla* = Grevill: scott: crypt: fl: n. 20. t. 100. Brid: bryol: univ: I. p. 188. Ibid: p. 199. 771. sub *Dryptodonte Schultzii* et *tricophyllo*. Sub *Trichostomo patente* Spr: syst: IV. 171. (*Scotia, prope Bipontium. Sardin: ad rupes humidæ montis S. Angelo Iglesias et Tonnara* MORIS st: sard: III. p. 14.). Vix a *pulvinata* diversa foliis lanceolato-subulatis superne sub-secundis.



3. *Seta exserta recta.*

\* 9. *Gr: ovata* = Hook: et Tayl: musc: brit: p. 71. t. 13. = Bals: et Denot: prodr: p. 153. excl: syn: Web: et Mohr: = *Gr: commutata* Hüben: musc: germ: p. 185. et Denot: mss: *Dryptodon ovatus* Brid: bryol: univ: I. p. 202. *Dicranum ovale* Hedw: musc: III. p. 81. t. 34. A (*Eur: fere tota. Pedem: ad saxa et rupes in locis collinis et montanis vulgaris* DENOT: mant: n. 76. *Sardin: ad rupes* MORIS st: sard: III. p. 14. sub *Dryptodonte*). Erecta ramosa, folia lanceolato-subulata pilifera reflexo-patula siccitate adpressa, capsula ovato-sub-rotunda operculo obtuse acuminato recto. « *Gr: ovata* WEB: et MOHR: idest *Dicranum* » *ovale* FUNCH: non HEDW: quod numquam vidi in » *Italia*, differt ab hac specie foliis e basi lata longe » acuminatis supremis quandoque piliferis, capsula » ovato-elliptica, præter alias notas quæ optimum » discrimen præbent. » DENOT: mss:

\* 10. *Gr: leucophaca* = Grevill: in Wern: trans: IV. p. 87. t. 6. = Bals: et Denot: prodr: p. 154. Denot: mant: n. 75. = Sub *Dryptodonte* Brid: bryol: univ: I. p. 773. (*Britan:, German: Pedem: ad rupes graniticas in montibus humilioribus vallis Intrascæ ad Verbanum* DENOT: l. c.). Læte cæspitosa fastigiato-ramosa, folia oblongo-ovata fusco-viridia solidinervia superiora longissime pilifera capsulam ovatam lævem fere attingentia inferiora mutica, operculum e convexo-depresso sub-incurvirostro. Confusa a SPR: cum *Gr: ovata*.

## Trib: VIII.

## ORTHOTRICHODEÆ

Arn: disp: meth: p. 261.

XXX. *Zygodon* Hook: et Tayl: musc: brit: p. 70. t. 3.  
 = Brid: bryol: univ: I. p. 590. tab: V. f. 4. =  
 Spr: syst: n. 3325. = *Bryi*, *Mnii*, *Gymnocephali*,  
*Amphidii*, *Gageæ* spec: nonnullæ quorund: (Inter  
*Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Peristom*: exter: dentibus 16.  
 » conjugatis, paribus arcte cohærentibus, inter: ciliis  
 » 8. setaceis introrsum horizontaliter porrectis. *Ca-*  
*lyptr*: dimidiata lævis. »

*Obs*: Genus satis distinctum *Orthotrico* affine, con-  
 stans 2-3. stirpibus zonam temperatam utriusque he-  
 misphærii colentibus.

1. *Z. conoideus* = Hook: et Tayl: l. c. Spr: syst:  
 IV. 184. (*Sardin*: ad corticem Oleæ europææ *Iglesias*  
 et ad rupes MORIS st: sard: III. p. 17. Ad Ulmos iis-  
 dem locis reperit DENOT:). Erectus brevis sub-ramo-  
 sus cæspitosus, folia conferta ovato-lanceolata pellu-  
 cido-punctata nervo prope apicem desinente, capsula  
 obovata erecta tandem sulcata operculo e basi con-  
 vexa oblique rostrato.

XXXI. ORTHOTRICHUM Hedw: musc: II. p. 96. = Brid: bryol: univ: I. p. 269. tab: III. f. 4. = Spr: syst: n. 3324. = *Brachytrichi*, *Grimmiæ*, *Weissiæ*, *Bryi*, *Polytrichi*, *Hypni* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Peristom*: simplex vel duplex;  
 » exter: dentibus 8. trilineatis vel 16. unilineatis la-  
 » tiusculis per paria approximatis; inter: (quando  
 » extat) ciliis 8-16. teneris linearibus. *Calyptr*: mi-  
 » traformis sursum pilosa vel rarius glabra. »

*Obs*: Genus stirpibus ditissimum (34. ex SPR:), nec tamen in alia genera dividendum ne affinitates ex habitu præsertim fere proprio disrumpantur; plantæ arborum parasiticæ erectæ cæspitosæ sæpe pulvinatæ per orbem sparsæ præsertim europææ.

#### Sect: I.

#### Peristomio simplici (*Brachytrichum*).

\* 1. *O. anomalum* = Hedw: musc: II. p. 102. t. 37. = Spr: syst: IV. 183. = Bals: et Denot: prodr: p. 157. *O. saxatile* Brid: bryol: univ: I. p. 275. *Bryum striatum* var:  $\beta$  et  $\gamma$  L. sp: 1580. Dill: musc: t. 55. f. 9. (*Eur*: fere tota, *Amer*: septentr: *Pedem*: ad saxa muros arborumque truncos passim; speciatim in collibus *Taurin*: ad saxa RE fl: tor: II. p. 196. BALB: cl: p. 6. sub *O. saxatili*). Erectum fastigiato-ramosum, folia ovato-lanceolata margine reflexo nervo evanescente, seta exserta, capsula oblonga tandem sulcata



operculo obtuse acuminato, calyptra conica pilosa, peristomii dentes 8. triangulares linea media longitudinali notatis vel, si mavis, 16. per paria geminati connatique. A cl: ALL: forsan confusum cum *O. striato* de quo infra n. 8.

\* 2. *O. cupulatum* = Hoffm: fl: germ: II. p. 26. = Hook: et Tayl: musc: brit: p. 125. t. 21. = Brid: bryol: univ: I. p. 272. Spr: syst: IV. 183. Bals: et Denot: prodr: p. 158. Denot: mant: n. 80. *O. strangulatum* P. de Beauv: Brid: l. c. p. 273. (*Eur*: fere tota, *Amer*: hor:, ins: *Melville*. *Pedem*: ad muros vetustos et saxa vulgare DENOT: mant: l. c. *Sardin*: ad rupes madidas in montanis MORIS st: sard: III. p. 15.). Differt a priori præsertim seta capsulaque immersa, calyptra semi-globosa parce pilosa demum glabra, peristomii dentibus 16. distinctis.

\* 3. *O. Sturmii* = Hornsch: et Hopp: crypt: cent: II. dec: II. = Funck: moostasch: p. 35. t. 23. = Brid: bryol: univ: I. p. 277. Spr: syst: IV. 183. Denot: mant: n. 81. (*Carinthia*. *Pedem*: ad saxa in montibus prov: *Novariens*: DENOT: l. c.). Distinguitur ab *O. cupulato* foliis acutioribus, capsula profundius immersa ac fere sessili, calyptra campanulata pilosissima.

## Sect: II.

Peristomio duplici (*Genuina*).

\* *Capsula immersa ciliis* 8.

\* 4. *O. affine* = Schrad: spicil: fl: germ: p. 67. = Schwægr: suppl: 1. 2. p. 19. t. 49. = Brid: bryol:

univ: I. p. 281. Spr: syst: I. 181. Bals: et Denot: prodr: p. 158. (*Eur: fere tota. Pedem: ad truncos arborum vulgatissimum, præsertim in collibus Taurinens: RE fl: tor: II. p. 197. BALE: el: p. 6. Sardin: ad corticem Sambuci Iglesias MORIS st: sard: III. p. 15.*). Erectum ramosum, folia patenti - recurva late lanceolata evanidi-nervia, capsula oblonga sub-sessilis sulcata operculo convexo-mucronato, peristomii exter: dentes 8. quandoque demum divisi reflexi inter: cilia cum dentibus alternantia, calyptra pilosa.

5. *O. pumilum* = Sw: musc: succ: p. 42. et 92. t. 4. f. 9. Brid: bryol: univ: I. p. 285. Bals: et Denot: prodr: p. 16. (*Eur: passim. Sardin: ad rivulos Iglesias MORIS st: sard: III. p. 15.*). A priori, cum quo conjungunt HOOK: et TAYL: et SPR:, vix distinctum statura multoties minori.

\*\* *Capsula exserta ciliis 8.*

\* 6. *O. Utchinsiae* = Sm: engl: bot: 36. t. 2523. = Brid: bryol: univ: I. p. 277. = Bals: et Denot: prodr: p. 162. per errorem in sect: ciliis 16. Spr: syst: IV. 181. Denot: mant: n. 82. (*Hibern:, German: Pedem: ad saxa et rupes in montibus humilioribus provinc: Novar: passim DENOT: l. c.*). Erectum fastigiato-ramosum, folia imbricata erecta stricta lanceolata, capsula longe exserta oblonga operculo convexo-conico, peristomii exter: dentes 16. obtusi linea longitudinali haud notati, calyptra sulcata pilosissima.

\* 7. *O. crispum* = Hedw: musc: II. p. 96. t. 35. = Spr: syst: IV. 182. = Sub *Uloia* Brid: bryol:

univ: I. p. 299. *Bryum striatum* δ L. sp: 1580. Sub *Polytricho* Neck: Dill: musc: t. 55. f. 11. (*Eur*: fere tota, *Amer*: bor: *Pedem*: ad truncos arborum in sylvis montanis DENOT: mss:). Differt a priori præsertim foliis *linearibus acuminatis* siccitate valde *crispatis*, capsula *non tam longe exserta ovato-sub-pyriformi*, peristomii dentibus *acuminatis*.

\*\*\* *Capsula immersa ciliis* 16.

\* 8. *O. striatum* = Schwægr: suppl: 1. 2. p. 29. t. 54. = Brid: bryol: univ: I. p. 290. = Spr: syst: IV. 182. Bals: et Denot: prodr: p. 161. Sub *Bryo* L. sp: 1579. aliique. Dill: musc: t. 55. f. 8. (*Eur*: fere tota, *Amer*: bor:, *Japon*:, ins: *Mascaren*:, *C. B. S.* *Pedem*: ad arborum cortices in sylvis ubique ALL: n. 2450. sub *Bryo*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p. 197. sub *Orthotricho*. BALB: el: p. 6. BIROLI fl: acon: II. p. 158. sub *Bryo*). Erectum ramosum, folia erecto - patentia lanceolata acuta margine sub - revoluta obscure bistriata nervo prope apicem desinente, capsula sub - immersa lævis oblonga operculo parvo convexo rostrato, peristomii dentes externi: 16. linea media longitudinali notati, cilia fimbriato - erosa, calyptra pilis raris hispidula.

\* 9. *O. diaphanum* = Schrad: spicil: fl: germ: p. 69. = Hook: et Tayl: musc: brit: p. 128. t. 21. = Brid: bryol: univ: I. p. 293. Spr: syst: IV. 183. Bals: et Denot: prodr: p. 160. Sub *Bryo* Gmel: (*Eur*: passim. *Pedem*: ad arborum truncos BALB: el: p. 6. *Sardin*: ad corticem *Sambuci*, *Cacti*, *Ulmi* MORIS st:



sard: III. p. 15.). Humillimum sub-ramosum, folia lanceolata apice diaphana evanidi-nervia, capsula subimmersa ovato-oblonga striata operculo convexo-mucronulato, peristomii extern: dentes 16. per paria approximati angusti, cilia minutissima, calyptra subpilosa.

XXXII. TETRAPEIS Hedw: musc: II. p. 87. t. 7. f. 32.  
 = Brid: bryol: univ: I. p. 129. tab: I. f. 11. =  
 Spr: syst: n. 3299. = *Bryi*, *Mnii*, *Orthotrichi*,  
*Grimmiæ*, *Tetrodontii* spec: nonnullæ quorund:  
 (Inter *Acrocarpos peristomos* Brid:).

» Seta terminalis. Peristom: simplex, dentibus 4.  
 » pyramidatis. Calyptr: mitræformis sulcata basi fissa.»

Obs: Genus constans 4. stirpibus, quarum sequens tantum indigena, ut sciam.

\* 1. *T. pellucida* = Hedw: spec: p. 43. t. 7. f. 1. a f. = Brid: bryol: univ: I. p. 134. = Spr: syst: IV. 149. Sub *Mnio* L. sp: 1574. aliique. Dill: musc: t. 31. f. 2. (Per totum hemisphærium boreale. *Pedem*: ubique in umbrosis sub-humidis præsertim sylvaticis ALL: n. 2436. RE fl: segus: p. 86. BINOLI fl: acon: II. p. 156. omnes sub *Bryo*. RE fl: tor: II. p. 188. sub *Tetraphide*). Dense cæspitosum simplex inferne nudum, folia laxa ovato-lanceolata punctato-pellucida nervo sub-evanido, capsula erecta cylindrica operculo conico.

XXXIII. SPLACHNUM Lin: syst: ed: Murr: n. 1188. =  
 Brid: bryol: univ: I. p. 239. tab: II. f. 12. = Spr:  
 syst: n. 3303. = *Splachni*, *Phasci*, *Bryi*, *Eremodontis* spec: nonnullæ quorund: (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis prælonga. *Peristom*: simplex den-  
 » tibus 8. vel sæpius 16. per paria coadunatis linea  
 » longitudinali exaratis tandem reflexis et capsulæ  
 » dorso adpressis. *Calyptr*: campanulata basi latere-  
 » que sub-integra capsula varia apophysata brevior. »

*Obs*: Genus satis distinctum tum characteribus al-  
 latis tum habitu fere proprio, inter omnes Muscos  
 seta longissima, capsulis diversimode apophysatis, co-  
 lumella sæpius producta superbiens, constans 20. cir-  
 citer stirpibus loca uda et paludosa regionum borea-  
 lium utriusque hemisphærii colentibus. Dolendum 3.  
 tantum in regionibus nostris adinveniri.

\* 1. *Spl: ampullaceum* = L. sp: 1572. = Hedw:  
 musc: II. p. 41. t. 14. = Brid: bryol: univ: I. p. 249.  
 Spr: syst: IV. 150. Dill: musc: t. 44. f. 4. sub *Bryo*  
 (*Eur*: fere tota, *Asia* septentr:, *Amer*: bor: *Pedem*:  
 in agro *Ciliani* locis humidis ALL: n. 2514.). Laxe  
 cæspitosum erectum sub-simplex, folia ovato-lan-  
 ceolata ad apicem serrulata læte viridia nervo excur-  
 rente, seta sanguinea flaccida pollicaris et ultra, cap-  
 sula erecta cylindrica apophysi obverse ampulliformi  
 viridi capsulæ ipsæ multo majori operculo convexo  
 aurantiaco.

\* 2. *Spl: sphæricum* = L. fil: meth: musc: p. 373.  
 t. 4. f. 1. = Brid: bryol: univ: I. p. 256. = Spr:  
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syst: IV. 151. (*Eur: septentr: et med: Pedem: in spongiosis Alpium prov: Novar: gregarium* DENOT: mant: n. 83.). Differt a priori præsertim foliis *spathulato-acuminatis*, apophysi *sphærica* capsulæ longitudinem *sub-æquante*, operculo *obtusissimo rubicundo*.

\* 3. *Spl: Frochlichianum* = Hedw: musc: III. p. 99. t. 40. = Brid: bryol: univ: I. p. 244. = Spr: syst: IV. 151. Sub *Dissodonte* Denot: mant: n. 84. ex Arn: et Grevil: (*Eur: bor: et med: Pedem: in alpibus Penninis* DENOT: l. c.). Erectum sub-divisum, folia ovata apice serrata inferiora linguæformia acuta superiora spathulata obtusa, seta crocea semi-uncialis, capsula obliqua pyriformis apophysi ob-conica capsula angustiore operculo obtuse conico e luteo virenti.

## Trib: IX.

## BUXBAUMOIDEÆ

Arn: disp: meth: p. 260.

XXXIV. BUXBAUMIA Lin: syst: ed: Murr: n. 1188. = Brid: bryol: univ: I. p. 328. tab: III. f. 10. = Spr: syst: n. 3345. (Inter *Acrocarpos peristomos* Brid:).

» *Seta* terminalis. *Peristom:* duplex, exter: denticulatus 16. squamæformibus truncatis fugacibus, inter: membrana conica 16-plicata. Insuper inter utrumque peristom: membrana tenera apice lacera et conica ad instar figurata. *Calyptr:* mitræformis conica acuta. »

*Obs:* Genus inter omnes Muscos habitu etiam in-



specto distinctissimum, constans 1-2. stirpibus radice bulbosa, sub-aphyllis, fructu maximo.

\* 1. *B. aphylla* = L. sp: 1570. = Hook: et Tayl: musc: brit: p. 143. t. 22. = Spr: syst: IV. 216. *B. vulgaris* Brid: bryol: univ: I. p. 329. Dill: musc: t. 68. f. 5. (*Eur*: fere tota, *Asia*, *Amer*: bor: *Pedem*: in cortice arborum circa *Tendam* ALL: n. 2432.). Brevissima bulbiformis, e bulbillo folia nec squamulæ confervoideæ fugacissimæ, seta scaberrima saturate purpurea, capsula maxima obliqua ovata dorso plana basi apophysi cylindracea setæ vix crassiori insidens operculo obtuse conico.

XXXV. *DIPHYSCIUM* Mohr: obs: p. 34. = Brid: bryol: univ: I. p. 325. tab: III. f. 9. = Spr: syst: n. 3298. = *Buxbaumia* spec: L. aliorumq:

» *Seta* terminalis brevissima. *Peristom*: duplex, ex-  
 » ter: oblitteratum, nempe margo capsulæ orificii cre-  
 » nulatus; inter: membrana conica truncata 16-pli-  
 » cata, plicis cum marginis crenulis alternantibus.  
 » *Calyptr*: mitræformis conica acuta. »

*Obs*: Genus priori valde affine, sed facile distinguendum seta sub-nulla, capsula immersa, peristomii structura habitu demum folioso, constans unica specie sequenti.)

\* 1. *D. foliosum* = Mohr: l. c. = Brid: bryol: univ: I. p. 326. = Hook: et Tayl: musc: brit: p. 32. t. 8. Spr: syst: IV. 149. Sub *Buxbaumia* L. syst: p. 945. aliiq. Dill: musc: t. 32. f. 13. (*Eur*: fere tota, *Amer*: bor: *Pedem*: in collibus *Taurinens*: BALB: el: p. 4. RE fl: tor: II. p. 202. Habeo etiam ex sylvis

prov: *Novariensis*: a DENOT:). Sub - acaule, folia radicalia externa longiuscula obtusa inter: ovata aristata perichæthalia longissime setacea sub - trifida, capsula magna immersa sub - sessilis late ovata gibba obliqua operculo conico acuminato.

## Trib: X.

## GYMNOSTOMOIDEÆ

Arn: disp: meth: p. 256.

XXXVI. HEDWIGIA Hedw: musc: III. p. 29. t. 11. = Bals: et Denot: prodr: I. p. 163. = *Anictangii*, *Harrisoniæ*, *Gymnostomi*, *Hypni*, *Bryi*, *Fontinalis*, spec: quorund: (Inter *Acrocarpos gymnostomos* Brid:).

» *Seta* lateralis. *Capsula* ovalis ore nudo. *Operculum* deciduum. *Calyptra* dimidiata. »

*Obs*: Genus *Gymnostomo* proximum, sed *seta* laterali satis distinctum.

\* 1. *H. aquatica* = Hedw: l. c. = Bals: et Denot: l. c. = Sub *Gymnostomo* Brid: bryol: univ: I. p. 93. Sub *Harrisonia* Spr: syst: IV. 145. Sub *Hypno* L. syst: p. 951. Dill: musc: t. 43. f. 70. (*Eur*: med: et austr: *Pedem*: in rivulis vallis di *Viù* prope *Ussey* BELLARD: app: p. 51. sub *Hypno*. Ad saxa præsertim prope rotas molendinarias in locis collinis montanisque DENOT: mss: *Sardin*: ad rivulos MORIS st: sard: III. p. 14. sub *Gymnostomo*). Elongata sub - simplex fluitans, folia linearia lanceolata falcata sub - secunda

nervo apicem attingente, capsula oblongo-ovata operculo oblique rostrato.

XXXVII. ANICTANGIUM Hedw: spec: p. 40. = Hook: et Tayl: musc: brit: p. 26. t. 1. = Spr: syst: n. 3290. = *Hedwigia*, *Schistidii*, *Gymnostomi*, *Bryi* spec: nonnullæ quorund:

» *Seta* terminalis. *Capsula* sub-cylindrica ore nudo.  
 » *Operculum* integrum deciduum. *Calyptr*: mitræformis basi in lacinias sub-æquales fissa. »

*Obs*: Genus ludens inter *Hedwigiam* et *Gymnostomum*, ad hoc magis accedens seta terminali, sed calyptræ structura diversum, constans ex SPR: 8. stirpibus, quarum major pars europæa.

\* 1. *A. ciliatum* = Hedw: l. c. = Hook: et Tayl: musc: brit: p. 27. t. 6. = Spr: syst: IV. 146. Bals: et Denot: prodr: p. 164. Sub *Schistidio* Brid: bryol: univ: I. p. 116. Sub *Gymnostomo* Sw: Sub *Bryo* Dicks: *Br: apocarpum*  $\beta$  L. sp: 1579. Dill: musc: t. 32. f. 5. (*Eur*: fere tota, *Amer*: bor: *Pedem*: ad saxa et rupes in collinis montanisque vulgare, occurrit quoque ad truncos arborum sed raro DENOT: mss: *Sardin*: ad saxa rupesque MORIS st: sard: III. p. 16. sub *Schistidio*). Erectum ramosum, folia alterna imbricata ovato-lanceolata enervia apice diaphano-ciliato-lacera, capsula sub-sessilis immersa operculo plano apiculato.

\* 2. *A. flaccidum* = Denot: mant: n. 85. (*Pedem*: in montibus vallis *Cogne* supra *Augustam* *Prætor*: DENOT: l. c.). « Collatum cum *A. pulvinato* FUNCK:, » differt statura proceriori, habitu laxo flaccido et » præcipue foliorum perichætialium indole, quæ in



- » illo ovato-acuminata apice pilifera planiuscula, in  
 » nostro concava oblonga apice attenuata diaphana  
 » nervoque ut plurimum percursa. » Denot: l. c.

XXXVIII. GYMNSTOMUM Hedw: sp: p. 30. = Hook: et  
 Tayl: musc: brit: p. 15. t. 1. = Brid: bryol: univ:  
 I. p. 57. tab: I. f. 6. = Spr: syst: n. 3288. = *Bryi*  
 et *Phasci* spec: L. (Inter *Acrocarpos gymnostomos*  
 Brid: ).

- » Seta terminalis. Capsula ore nudo. Operculum  
 » deciduum. Calyptr: dimidiata. »

Obs: Genus ditissimum (spec: 50. ex BRID:, 32. ex  
 SPR:) habitu vario.

1. *G. curvisetum* = Schwægr: suppl: 2. 1. p. 17.  
 t. 105. *G. Physcomitrium curvisetum* Brid: bryol: univ:  
 I. p. 103. Spr: syst: IV. 144. (In monte *Atlante*.  
*Sardin:* ad vias et in pascuis MORIS st: sard: III. p.  
 14.). Humile simplex erectum basi nudum, folia ob-  
 longo-lanceolata serrata evanidi-nervia, seta curvata  
 ita ut capsula elongato-pyriformis horizontalis evadat  
 operculo plano.

\* 2. *G. pyriforme* = Hedw: musc: II. p. 87. t. 1.  
 f. 1. 3. = Brid: bryol: univ: I. p. 98. = Spr: syst:  
 IV. 144. Bals: et Denot: prodr: p. 166. Sub *Bryo*  
 L. sp: 1580. alique. Dill: musc: t. 44. f. 6. (*Eur:*  
 fere tota, *Afr:* bor: *Pedem:* in agris et fossis humi-  
 dis et terra argillacea frequens ALL: n. 2452. sub  
*Bryo*. RE fl: segus: p. 86. sub eod: et fl: tor: II. p.  
 187. sub *Gymnostomo*. Ad vias della *Bicocca* prope  
 urbem *Novar:* BIROLI fl: acon: II. p. 158. sub *Bryo*).  
 Simplex, folia oblongo-spathulata serrulata evanidi-

nervia, capsula erecta obovato - pyriformis operculo convexo breviter rostrato, calyptra ampla ante maturitatem capsulam involvens dein latere fissa.

\* 3. *G. fasciculare* = Hedw: sp: p. 38. t. 4. f. 5. 8. = Brid: bryol: univ: I. p. 101. = Spr: syst: IV. 144. Bals: et Denot: prodr: p. 166. Sub *Bryo* Dicks: (*Eur*: med: et austr: *Pedem*: BALB: el: p. 5. In ericetis humidis frequens DENOT: mss: *Sardin*: ad vias umbrosas *Arizzo* MORIS st: sard: III. p. 14.). Priori valde affine, sed differt statura multo *minori*, foliis *lterioribus*, capsula *angustiore* operculoque *planiusculo obtusissimo*.

\* 4. *G. truncatulum* = Hook: et Tayl: musc: brit: p. 22. t. 7. = Brid: bryol: univ: I. p. 67. = Bals: et Denot: prodr: p. 168. *G. truncatum* Spr: syst: IV. 143. ex Hedw: aliique. Sub *Bryo* L. sp: 1584. Dill: musc: t. 45. f. 7. F K (*Eur*: fere tota, *Oriente*, *Ægypt*: *Pedem*: locis umbrosis ad vias præsertim in collibus ALL: n. 1465. sub *Bryo*. In sylvis *Venariæ* ad terram argillosam RE fl: tor: II. p. 187. et app: I. p. 39. Secus fossas et vias vulgare uti et *Gymnostomum ovatum* BIROLI fl: acon: II. p. 160. sub *Bryo*. *Sardin*: in pascuis MORIS st: sard: III. p. 14.). Erectum simplex, folia plana ovato-lanceolata integerrima nervo crasso in cuspidem longiusculam excurrente, capsula ovato-oblonga erecta truncata operculo convexo oblique rostellato; stirps valde polymorpha. Huc pertinere videtur *G. intermedium* TURN: non SCHWÆGR., quod enumerat MORIS l. c. e *Sardin*: in pascuis circa *Calarim*; differentia e forma capsulæ fallax, etenim ante operculi lapsum illa oblonga vel cylindrica ad-

paret, effacta e priori forma ad turbinatam transit.

\* 5. *G. Heimii* = Hedw: musc: I. p. 80. t. 30. = Bals: et Denot: prodr: p. 167. = *G. Heimii*, affine, et *obtusum* Brid: bryol: univ: I. p. 71. 72. 73. *G. intermedium* Schwægr: non Turn: (*Eur: passim. Pedem: ex BALE: el: p. 5. sub G. obtuso*). Dissert a priori speciatim foliis *angustioribus* apice *serrulatis*, capsula *obovata*, operculo *incurvo rostrato*. Forsan huc referendum etiam *G. cuspidatum* BALE: l. c. differens tantum foliis *cuspidatis*, ore capsulæ *ampliore*. Circa *G. microspermum* ab eod: BALE: enumeratum ex BRID:, plantam non vidi, nec sub hoc nomine inveni penes Auctores.

6. *G. conicum* = Schwægr: suppl: 1. 1. p. 26. t. 9. Brid: bryol: univ: I. p. 63. Spr: syst: IV. 143. (*German:, Helvet:, Anglia, Italia. Sardin: in pascuis arenosis frequens MORIS st: sard: III. p. 14.*). A varr: minoribus *G. truncatuli* apte distinguitur operculo *conico obtuso*.

\* 7. *G. ovatum* = Hedw: musc: I. p. 16. t. 6. = Brid: bryol: univ: I. p. 59. = Spr: syst: IV. 143. Sub *Bryo* Gmel: aliique. (*Eur: fere tota. Pedem: BALE: el: p. 5. Ad vias in collibus Taurin: RE fl: tor: II. p. 187.*). Erectum simplex brevissimum, folia ovata concava pilifera nervo lato medio tenus incrassato lamelloso granulifero, capsula vix emergens erecta oblongo-ovata operculo oblique rostellato.

\* 8. *G. microstomum* = Hedw: musc: III. p. 71. t. 30. = Bals: et Denot: prodr: p. 169. = Sub *Hymenostomo* Brid: bryol: univ: II. p. 77. Spr: syst: IV. 147. Sub *Bryo* Dicks: (*Eur: fere tota. Pedem: vul-*



gare ad terram in locis sylvaticis et præcipue ad ripas  
 Denot: mss: *Sardin:* ad vias umbrosas *Moris st: sard:*  
 III. p. 14. sub *Hymenostomo*). Capsula orificio epi-  
 phragmate tenuissimo fugacissimoque donata distinguit  
 præsertim hanc stirpem a congeneribus, quæ ideo ad  
*Hymenostomum* a nonnullis amandatur; planta exigua  
 foliis lineari-lanceolatis acuminatis, capsula alte emer-  
 gente ovato-obliqua, operculo subulato capsula dimi-  
 dio brevior.

\* 9. *G. rupestre* = Schwægr: suppl: I. I. p. 31.  
 t. 11. = Brid: bryol: univ: I. p. 77. = Spr: syst: IV.  
 144. Bals: et Denot: prodr: p. 169. (*German: austr:,*  
*Helvet:, Delphinat: Pedem:* in sylvis della *Mandria*  
*RE* app: III. p. 18.). Erectum flexuosum ramosum,  
 folia linearia acutiuscula sub-incurva nervo crasso con-  
 tinuo rufescente quandoque sub-evanescente, capsula  
 ovata ore contracta fusca operculo conico leniter ob-  
 liquo capsula brevior.

\* 10. *G. microcarpon* = Nees: et Hornsch: bryol:  
 germ: p. 161. t. X. f. 20. = Brid: bryol: univ: I. p.  
 81. = Sub *G. curvirostro* Spr: syst: IV. 144. (*Styria,*  
*Lappon: Pedem:* in monte *Pennino* Denot: mant: n.  
 86.). Elongatum gracile dichotomum, folia erecta o-  
 vato-subulata abrupti-nervia, capsula emergens obo-  
 vata operculo e basi convexa curvi-rostro capsulam  
 sub-æquante. Vix distinguitur a *G. curvirostro* Hedw:  
 caulium gracilitate, foliisque erectis nec patenti-re-  
 curvis.

\* 11. *G. pallidisetum* = Nees: et Hornsch: bryol:  
 germ: p. 166. t. XI. f. 22. = Brid: bryol: univ: I.  
 p. 83. = Sub *G. curvirostro* Spr: syst: IV. 144. (*Ca-*

*rinthia*. *Pedem*: in alpinis *Penninis* DENOT: mant: n. 87.). Priori valde affine, sed foliis *patenti - recurvis* ut in *G. curvirostro*, et præsertim capsula *sub - immersa oblonga* diversum.

\* 12. *G. æstivum* = Hedw: sp: p. 32. t. 11. f. 4. 7. = Spr: syst: IV. 145. = *G. compactum* Brid: bryol: univ: I. p. 86. (*German*., *Britan*., *Scandinav*: *Pedem*: ad rupes humiditas in montibus editior: prov: *Novar*: DENOT: mant: n. 88.). A tribus præcedentibus, quorum habitum refert, distinguitur præcipue setis primo intuitu lateralibus ob continuationem caulibus, foliisque perichætialibus convolutis.

\* 13. *G. variegatum* = Denot: mant: n. 89. (*Pedem*: ad rupes humiditas in montibus vallis *Intrascœ* ad *Verbanum* DENOT: l. c.). « Plurimum convenit cum » *Sphagno contorto*  $\beta$  *rufescente* BRID: bryol: univ: I. » p. 8., at ramis minime contortis, foliis æqualiter » imbricatis apice truncato - denticulatis ab illo dif- » ferre videtur. » DENOT: l. c.

## Trib: XI.

### SPHAGNOIDEÆ

Arn: disp: meth: p. 254.

XXXIX. SPHAGNUM Lin: syst: ed: Murr: n. 1187. = Brid: bryol: univ: I. p. 1. t. 1. f. 1. = Spr: syst: n. 3291. = Lam: ill: t. 872. (Inter *Androcarpos* Brid:).

» *Capsula* sessilis ore nudo in receptaculo apophy- » siformi dilatato. *Calyptr*: irregulariter fissa nunc » basi capsulæ adnata nunc transversim rumpens. »

*Obs:* Genus præter fructificationem, habitu etiam proprio omnino distinctum, sc: plantæ flaccidæ fasciculato-ramosæ foliis enerviis diaphanis, capsula ovata vel sub-rotunda cum crepitu desiliente. Species 17. ex BRID:, inter quas nonnullæ dubiæ, plures pro varr: habendæ, unde a SPR: 4. tantum admissæ.

\* 1. *Sph: acutifolium* = Ehrh: crypt: exsic: n. 72. = Hook: et Tayl: musc: brit: p. 15. t. 4. = Spr: syst: IV. 147. Bals: et Denot: prodr: p. 172. *Sph: subulatum* Brid: bryol: univ: I. p. 18. *Sph: palustre*  $\beta$  L. sp: 1500. (*Eur:* passim, *Amer:* bor: *Pedem:* in paludosis et in humidis tum locorum sylvaticorum planitiei cum montium DENOT: mss: In locis irriguis *d'Intra*, *Pallanza* et *Piano di Fariolo* vulgare BIROLI fl: acon: II. p. 154. sub *Sph: capillifolio* HEDW: ?). Erectum ramosum elatiusculum ramis attenuatis confertis filiformibus, folia lanceolata plus minus angusta concava superne involuta apice suberosa, capsula obovata parum exserta. Mire variat præsertim foliorum latitudine.

\* 2. *Sph: latifolium* = Hedw: spec: p. 27. = Spr: syst: IV. 147. = *Sph: obtusifolium* Hook: et Tayl: musc: brit: p. 13. t. 4. f. sinistr: excl: var:  $\beta$ . *Sph: cymbifolium* Brid: bryol: univ: I. p. 2. Bals: et Denot: prodr: p. 170. *Sph: palustre* L. sp: 1569. Dill: musc: t. 32. f. 1. (In paludibus fere totius orbis. *Pedem:* ubique locis spongiosis sive in alpibus sive in montibus ALL: n. 2428. RE fl: segus: p. 85. In uliginosis præcipue ad colles BIROLI fl: acon: II. p. 154. omnes sub *Sph: palustre*). Differt a priori præsertim statura generatim majore, ramis magis abbreviatis, foliis la-



tioribus obtusis, capsula sub-globosa. Forsan sub hac specie in flora pedem: continetur etiam præcedens.

\* 3. *Sph: compactum* = Brid: bryol: univ: I. p. 16. = Schwægr: suppl: 1. 1. p. 12. t. 3. = Bals: et Denot: prodr: p. 171. *Sph: obtusifolium*  $\beta$  Hook: et Tayl: musc: brit: t. 4. f. dexter: excl: var:  $\alpha$ . *Sph: latifolium* var: Spr: syst: IV. 147. (*Gallia, Helvet., Britan: Pedem: ad margines paludum in ericetis* DENOT: mss:). Statura minori, foliis ovatis attenuatis apice præmorsis ibique plerumque denticulatis margine involutis a *latifolio* diversum.

### Trib: XII.

#### PHASCOIDEÆ

Arn: disp: meth: p. 255.

XL. PHASCUM Lin: gen: 1189. = Brid: bryol: univ: I. p. 21. tab: 1. f. 2. = Spr: syst: n. 3284. = Lam: ill: t. 873. = *Sphagni, Bryi, Pleuridii* spec: nonnullæ quorund: (Inter *Acrocarpos astomos* Brid:).

» *Capsula* astoma operculi rudimento clausa. *Calyptr:* parva campanulato-subulata dimidiata fugax. »

*Obs:* Genus distinctissimum habitu etiam inspecto; plantæ inter *Muscos* plebeæ pusillæ sub-acaules, foliis summopere diversis, capsulis ovatis vel sub-rotundis seta brevi plerumque terminali suffultis; spec: 30. circiter per zonam temperatam utriusque orbis sparsæ.

\* 1. *Ph: serratum* = Schreb: de Phasc: p. 9. t. 2. = Brid: bryol: univ: I. p. 28. = Spr: syst: IV. 140.

Bals: et Denot: prodr: p. 174. (*Eur: fere tota. Pedem: in ericetosis humidis ad terram* DENOT: mss: *Sardin: in udis Cagliari* MORIS st: sard: III. p. 16.). Exiguum sub-acaule radicibus filiformibus fuscis ex quibus prodeunt filamenta articulata repentia (*cotyledones confervoidæ* quorund: male), folia lanceolata fortiter serrata laxè reticulata enervia, capsula sub-immersa sub-rotunda intense purpurea.

2. *Ph: crassinervium* = Schwægr: suppl: 1. 1. p. 4. t. 2. Spr: syst: IV. 141. (*Pensylv: , Eur: agro Bipopontino. Sardin: in campestribus limosis S. Elia, Cagliari, la Maddalena, Iglesias etc.* MORIS st: sard: III. p. 15.). Differt a priori, cum quo habitu statura filamentisque confervoidæis convenit, foliis rigidiusculis supra medium denticulatis nervoque excurrente instructis.

\* 3. *Ph: subulatum* = L. sp: 1570. = Hedw: musc: I. p. 93. t. 35. = Spr: syst: IV. 141. Bals: et Denot: prodr: p. 135. excl: syn: L. addito *Ph: axillari* n. 4. Dill: musc: t. 32. f. 10. (Vulgatissimum per totam *Eur: Pedem: ubique ad aggeres atque etiam in agris sub fine hyemis* ALL: n. 2431. RE fl: tor: II. p. 186. BIROLI fl: acon: II. p. 155. BALB: el: p. 7. *Sardin: in argillosis frequens* MORIS st: sard: III. p. 16.). Caulescens breve sub-simplex, folia erecta basi dilatata subulato-setacea nervo prope apicem evanescente, capsula immersa ovato-acutiuscula sed conspicua.

4. *Ph: crispum* = Hedw: musc: I. p. 25. t. 9. Spr: syst: IV. 141. (*Eur: passim. Sardin: in pascuis Cagliari* MORIS st: sard: III. p. 15.). Cæspitosum caulescens; a congencribus foliis perichæatialibus lanceo-

lato-subulatis siccitate tortilibus crispis capsulam omnimodo abscondentibus facillime distinguitur. = 5. *Ph: rectum* = Wither: bot: arrang: IV. p. 771. t. 18. f. 1. Spr: syst: IV. 140. (*Britan: Sardin: in arenosis et ad fossas MORIS st: sard: III. p. 16.*). Humillimum acaule, folia erecta late ovata breviter acuminata nervo excurrente, capsula globosa oblique mucronulata exserta. = 6. *Ph: curvicollum* = Hedw: musc: I. p. 32. t. 11. Spr: syst: IV. 141. (*Eur: passim. Sardin: in pascuis et ad margines agrorum MORIS st: sard: III. p. 16.*). A præcedente, quod æmulat statura, distinguitur foliis lanceolatis acuminatis, setis brevioribus curvatis, capsula elliptica obtusiuscula. = 7. *Ph: carniolicum* = Web: et Mohr: bot: tasch: p. 69. et 450. Spr: syst: IV. 141. (*Carniola, ad Rhenum. Sardin: in pascuis humidis limosisve Cagliari, Iglesias MORIS st: sard: III. p. 15.*). Sub-caulescens, folia oblongo-lanceolata inferiora breviter erecto-patentia nervo excurrente instructa superiora longiora erecta nervo cuspidulata capsulam ovalem brevissime pedunculatam læte rubram sub-acuminatam longe superantia.

\* 8. *Ph: cuspidatum* = Schreb: de Phasc: p. 8. t. 1. f. 2. = Brid: bryol: univ: I. p. 41. = Spr: syst: IV. 141. Bals: et Denot: prodr: p. 178. *Ph: Schreberianum* et *curvisetum* Dicks: *Ph: piliferum* Schreb: Brid: et Spr: *Ph: acaulon* α L. sp: 1570. aliique. Dill: musc: t. 32. f. 11. (*Eur: fere tota, Asia septentr: Pedem: in agris requietis exeunte hyeme frequens ALL: n. 2430. sub Ph: acaulon. BALB: el: p. 7. sub Ph: pilifero. Ad fossas et in hortis locis humidis BIROLI fl: acon: II. p. 154. Sardin: ad vias Cagliari, in cor-*



tice *Ulmi Burcei* MORIS st: sard: III. p. 16.). Laxe cæspitosum caulescens, folia inferne laxa superiora confertiora ovato-oblonga nervo excurrente cuspidata vel pilifera, capsula sub-rotunda recta immersa vel deorsum seta curvata producta. Ludit caulibus plus minus elongatis quandoque ramosis, foliis plus minus oblongo-ovatis vel ovato-oblongis cuspidatis piligerisve, ita ut varr: innumeræ limitibus firmis vix circumscribi possint. Cons: pro iisdem speciatim BRID: II. cc.

9. *Ph: muticum* = Schreb: de Phasc: p. 8. t. 1. f. 11. 14. Spr: syst: IV. 140. *Ph: acaulon*  $\beta$  L. sp: 1570. (*Eur: passim. Sardin: in humidis argillosis frequens* MORIS st: sard: III. p. 16.). Differt a priori præsertim statura valde minori, caule sub-nullo, foliis late ovatis sub-muticis conniventibus capsulamque obtegentibus.

### Trib: XIII.

#### ANDREÆACEÆ

Nob: = *Musci frondosi desciscentes* Spr:

XLI. ANDREÆA Ehrh: haun: mag: 1778. = Brid: bryol: univ: II. p. 725. tab: X. f. ult: = Spr: syst: n. 3346. = *Jungermannia* spec: nonnullæ quorund: (Inter *Schistocarpos* Brid:).

» *Capsula* astoma basi in apophysim intumescens  
 » medio longitudinaliter 4-valvis, valvulis apice oper-  
 » culo persistente nexis. *Calyptra* capsulam primum

» obtegens, demum sub-horizontaliter rumpens, he-  
 » misphærica latere fissilis. »

*Obs:* Genus medium tenens inter *Bryaceas* veras, et *Hepaticas*, ad primas accedens præsertim operculi et calyptræ præsentia, ad alteras, et speciatim ad *Jungermannias*, habitu et capsulæ dehiscendi modo, constans 4. circiter stirpibus europæis, cæspitosis erectis ramosis, foliis sparsis imbricatis crassiusculis tenerimis, capsula breviter pedunculata operculo minuto.

\* 1. *A. alpina* = Hedw: spec: p. 49. t. VII. f. p. = Brid: bryol: univ: II. p. 728. = Spr: syst: IV. 216. Sub *Jungermannia* L. sp: 1601. aliique. Dill: musc: t. 73. f. 39. (*Eur:* alpinus. *Pedem:* ad rupes in montibus editioribus vallis *Intrasca* DENOT: mant: n. 91.). Erecta ramosa inferne denudata, folia æqualiter imbricata obovato-acuminata enervia ferrugineo-fusca; siccata, uti reliquæ species, fragillima evadit.

\* 2. *A. rupestris* = Hedw: spec: p. 47. t. III. f. 2. = Brid: bryol: univ: II. p. 726. = Spr: syst: IV. 216. Sub *Jungermannia* L. sp: 1601. aliique. Dill: musc: t. 73. f. 40.? (Cum priore. *Pedem:* ad rupes editiores alpium vallis *Intrasca*, *Vegezzo*, *Canobbio*, nec non aliorum montium provinc: *Novar:* vulgaris DENOT: mss:). Præcedenti, cum qua colore omnium partium habituque convenit, paullo minor, folia ovato-lanceolata obtusiuscula superiora falcata vel etiam rectiuscula. DILL: hanc cum seq: commiscuit, uti, momente BRID:, ex ejus hb: elucet, hinc ad quam inter ipsas ejus synon: pertineat ambigitur.

\* 3. *A. Rothii* = Web: et Mohr: bot: tasch: p. 336. t. XI. f. 7. 8. = Brid: bryol: univ: II. p. 730.

= Spr: syst: IV. 216. (*German: bor:, Britan:, Gallia.*  
*Pedem: in alpibus editioribus provinc: Novar: DENOT:*  
*mant: n. 90.*). A præcedentibus distinguitur præsertim  
 caule *simpliciusculo*, foliis caulinis *secundis nervosis*  
 perichætialibus oblongioribus *convolutis enerviis*.

Obs: geographica circa *Bryaceas*.

*Bryaceæ* per orbem sparsæ circiter . . . 900

*Bryaceæ* pedemontanæ.

<i>Polytrichum</i>	.	.	.	.	.	.	.	11
<i>Bartramia</i>	.	.	.	.	.	.	.	5
<i>Funaria</i>	.	.	.	.	.	.	.	1
<i>Meesia</i>	.	.	.	.	.	.	.	4
<i>Pohlia</i>	.	.	.	.	.	.	.	4
<i>Bryum</i>	.	.	.	.	.	.	.	22
<i>Hookera</i>	.	.	.	.	.	.	.	1
<i>Timmia</i>	.	.	.	.	.	.	.	1
<i>Daltonia</i>	.	.	.	.	.	.	.	1
<i>Anomodon</i>	.	.	.	.	.	.	.	3
<i>Neckera</i>	.	.	.	.	.	.	.	2
<i>Fontinalis</i>	.	.	.	.	.	.	.	1
<i>Leskea</i>	.	.	.	.	.	.	.	11
<i>Hypnum</i>	.	.	.	.	.	.	.	59
<i>Leptohymenium</i>	.	.	.	.	.	.	.	2
<i>Leptodon</i>	.	.	.	.	.	.	.	1
<i>Leucodon</i>	.	.	.	.	.	.	.	1
<i>Fabronia</i>	.	.	.	.	.	.	.	2
<i>Tortula</i>	.	.	.	.	.	.	.	12
								<u>144</u>



	S. R.	. 144
<i>Didymodon</i> . . . . .		11
<i>Dicranum</i> . . . . .		18
<i>Coscinodon</i> . . . . .		5
<i>Weissia</i> . . . . .		10
<i>Campylopus</i> . . . . .		2
<i>Encalypta</i> . . . . .		4
<i>Cinclidotus</i> . . . . .		1
<i>Trichostomum</i> . . . . .		8
<i>Grimmia</i> . . . . .		9
<i>Orthotrichum</i> . . . . .		8
<i>Tetraphis</i> . . . . .		1
<i>Splachnum</i> . . . . .		3
<i>Buxhaumia</i> . . . . .		1
<i>Diphyscium</i> . . . . .		1
<i>Hedwigia</i> . . . . .		1
<i>Anictangium</i> . . . . .		2
<i>Gymnostomum</i> . . . . .		11
<i>Sphagnum</i> . . . . .		3
<i>Phascum</i> . . . . .		3
<i>Andreæa</i> . . . . .		3
		<u>249</u>

Et sic quartam partem excedunt.

## ORDO CC.

## H E P A T I C Æ

(Juss: gen: p. 7. = W. sp: V. p. XXXXII.  
 n. VIII. = Bartl: ord: nat: p. 11. = *Musci*  
*hepatici* Spr: syst: IV. p. 138. ex Hedw: =  
*Calyptratæ deoperculatæ* Web: et Mohr: =  
 Dents: crypt: 1807. p. 9. = *Musci hepatici*  
 Mart: consp: regn: veg: p. 2.).

*Char: essentialis.*

- » *Thecæ* (*fructus*, *sporangium* HEDW:, *pixydium*
- » EHRH:, *capsula* BRID:, *anthera* L.) capsulæformes,
- » initio *calyptra* demum apice rupta tectæ, sæpius
- » stipitatæ, solitariæ, raro sub *receptaculo* communi
- » aggregatæ, sæpissime valvulis 2-4-8. apice dehi-
- » scentes, rarissime indehiscentes. *Sporæ* (semina?)
- » nunc columnæ centrali, nunc valvulis insertæ, sæpe
- » *elateribus* (fibra semina elasticitate sua ejiciens) in-
- » tegris vel catenulatis (*catenula* quorund:) sustentæ.
- » *Gemmæ* et *propagula* varia. »

*Obs:* Ordo hinc *Bryaceis*, illinc *Lichenibus*, quo-  
 rum partem constituebat ex L., affinis, varie ab Au-  
 ctoribus circa organa sexualia inspectus; apud DC. ex  
 Juss: erant distincta *monoica* vel *dioica*. MASC: globuli  
 liquore fœcundante plane aggregati in calyce sæpius  
 sessili. FOEM: ovaria nuda aut perichætio cincta, cap-  
 sulæ sæpius pedunculatæ, semper operculo destitutæ,

semina sæpius elateriis adhærentia. Modo constat ex SPR: 13. generibus. Herbæ humiles per orbem sparsæ loca umbrosa humidiuscula præferentes, perennantes, terram rupes arborum truncos denso cæspite vestientes, quandoque membranaceo - expansæ *Lichenum* more, sæpius tamen caulem foliatum referentes (*surgulus* L., *truncus* HEDW., *frons* quorund:); folia discreta enervia e simplici cellularum lamina facta, disticha vel rarius sparsa, sæpius dentata lobata vel partita; interdum in parte inferiori caulis a foliis nudata adsunt *stipulæ* adpressæ (*amphigastrium* EHRH:) 1-3-seriatæ. Ex præsentia vel defectu *valvularum* in theca, ex earum *numero*, ex ipsius thecæ *structura*, ex præsentia vel defectu *elaterum*, ex eorum *forma*, nec non ex præsentia *forma* vel defectu *receptaculi*, *gemmarum* et *propagulorum* (1), genera sua determinavit SPR: A nonnullis Botanicis rite in duas tribus *Hepaticæ* omnes distinctæ fuerunt, sc: *Hepaticæ lichenoideæ* (*Homallophyllæ* W. sp: V. p. XXXXII. n. IX., DUBY bot: gall: p. 592., MÉRAT nouv: fl: par: ed: 3. tom: I. p. 317.), quæ fructum habent *indehiscentem*, et sunt *elateriis destitutæ*; ac *Hepaticæ muscosæ* (*Jungermannicæ* DUBY l. c. p. 584., MÉRAT l. c. p. 319.), fructibus *dehiscentibus*, sporis *elateriis adfixis*. Cl: MART: de hoc ordine 5. distinctas familias constituit, sc: *Homallophyllæ* ex W., *Carpocereæ* ex DUMORT:, *Targionicæ* ex NEES:, *Cephalothecæ* et *Jungermanniaceæ* ex DUM:

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(1) Corpora sub-rotunda vel oblonga rarissime sub-foliacea quæ decidunt a planta novumque individuum formant.



I. JUNGERMANNIA Lin: syst: ed: Murr: n. 1196. excl: paucis stirpib: = Spr: syst: n. 3347. = Lam: ill: t. 875. = *Antoiriæ*, *Bellinciniæ*, *Porellæ*, *Calypogejæ*, *Mnii*, *Fossombroniciæ*, *Lycopodii*, *Candolleæ*, *Romeriæ*, et *Blasiæ* spec: nonnullæ quorund:

» *Theca* 4-valvis globulosa solitaria stipitata stellulariter dehiscens. *Sporæ* elateribus spiralibus vel caulinariis sustentæ. *Gemmæ* variæ. »

*Obs:* Genus numerosissimum, a quibusdam perperam in plura divisum, constans ex SPR: stirpibus 214. per orbem sparsis, quarum tertia circiter pars europæa; herbæ *caulescentes* vel simpliciter *frondosæ*, sc: membrana expansa, *Lichenum* more, nervosa vel enervi loco foliorum instructæ vel sæpius foliosæ stipulatæ vel exstipulatæ, stipulis integris vel varie divisis, foliis auriculatis vel exauriculatis integris dentatis vel varie sectis; ex hisce omnibus nec non ex structura ac directione caulis foliorum ac frondium statuunt Auctores satis aptas generis divisiones, ac stirpium characteres etsi extricatu difficillimos. Cons: inter alios HOOKER *Jungermanniarum icon*: Lond: 1813.; SCHWÆGRICHEN *Hist: musc: hepat: prodr*: Lips: 1814.; WEBER *Hist: musc: hepat: prodr*: Kil: 1815.; RADDI *Jungermanniografia etrusca* Modena 1818.

## 1. Caulescentes.

### α *Stipulatæ*.

\* 1. *J. dilatata* = L. sp: 1600. non Web: = Spr: syst: IV. 217. = Hook: junger: t. 5. Dill: musc: t. 72.

f. 27. Vern: *Mouffa* uti ceteri *Musci* peculiare nomen non habentes (*Eur*: passim. *Pedem*: frequens in sylvis ad arborum truncos ALL: n. 2528. RE fl: segus: p. 87. et fl: tor: II. p. 217. BIROLI fl: acon: II. p. 165. *Sabaud*: BILLET in litt: sub *J. tamariscifolia*. *Sardin*: ad truncos arborum et ad rupes MORIS st: sard: III: p. 17.). Caulis repens valde ramosus viridi-flavescens apice fructiferus, folia alterna sub - orbiculata integerrima adpressa superiora dilatata omnia auriculata auriculis fornicato-hemisphæricis basi truncatis, stipulæ triplici ordine remotiusculæ 2-fidæ. *J. tamariscifolia* WEB: quam huc refert SPR: differt ex specim: meis partibus omnibus tenuioribus, colore viridi-rubescente.

\* 2. *J. Tamarisci* = L. sp: 1600. = Spr: syst: IV. 217. = Hook: junger: t. 6. Dill: musc: t. 72. f. 31. *J. dilatata* Web: non L. (*Eur*: passim. *Pedem*: truncos arborum atque rupes inhabitat ALL: n. 2529. Occurrit in montanis supra saxa et ad arborum truncos RE fl: segus: p. 87. et fl: tor: II. p. 217. BIROLI fl: acon: II. p. 166. *Sardin*: ad truncos arborum et ad rupes in sylvis frequens MORIS st: sard: III. p. 17.). Vix a priori distincta statura undique *minori*, colore *fusco*, auriculis *clavatis* basi fissis stipula *minoribus*; magis facie accedit ad *J. tamariscifoliam* WEB:

\* 3. *J. platyphylla* = L. sp: 1600. = Spr: syst: IV. 219. = Hook: junger: t. 40. Dill: musc: t. 72. f. 32. *Antoiria vulgaris* Raddi (*Eur*: passim. *Pedem*: ad arborum truncos in sylvis ALL: n. 2530. RE fl: segus: p. 87. et fl: tor: II. p. 217. *Sabaud*: BILLET in litt: *Sardin*: ad truncos arborum et ad rupes in sylvis

MORIS st: sard: III. p. 17.). Caulis prostratus pinnato-ramosus intense viridis latere fructiferus, folia imbricata disticha rotundata, auriculæ et stipulæ oblongæ obtusæ integerrimæ, theca brevissime stipitata.

\* 4. *J. lævigata* = Schrad: Samml: II. p. 6. = Spr: syst: IV. 219. *J. vernicosa* Cassin: in Mérat fl: par: ed: 2. vol. I. p. 221. = Hook: junger: t. 35. *Belliminia montana* Raddi (*Eur: Pedem: ad montem Moro BIROLI fl: acon: II. p. 166.*). Vix differt a priori auriculis *lingulatis denticulatis*, stipulis *spinuloso-dentatis*.

\* 5. *J. viticulosa* = L. sp: 1597. = Spr: syst: IV. 221. = Hook: junger: t. 60. Dill: musc: t. 69. f. 7. Sub *Calypogeja* Raddi (*Eur: passim. Pedem: super terram in sylvis umbrosis humidis ALL: n. 2521.*). Procumbens ramosa pallide viridis, folia ovato-oblonga integerrima plana horizontalia exauriculata, stipulæ lato-ovatæ denticulatæ, theca lateralis in ramulis infimis ex calyptra hypogæa.

6. *J. polyanthos* = L. sp: 1597. (*Eur: Sardin: juxta rivulos et in sylvis Arizzo MORIS st: sard: III. p. 17.*). Prostrata parum ramosa saturate viridis, folia horizontalia sub-rotunda exauriculata, stipulæ oblongæ 2-fidæ, thecæ numerosæ laterales. = 7. *J. Trichomanis* = Spr: syst: IV. 223. ex Dicks: *J. fissa* Scop: DC. *Mnium Trichomanis* et *fissum* L. (*Eur: Sardin: in humidis montanis MORIS st: sard: III. p. 17.*). Priori valde affinis, sed differt præsertim stipulis *rotundatis lanatis*, calyptra *sub-terranea*.

\* 8. *J. bidentata* = L. sp: 1598. non Schmid: = Spr: syst: IV. 224. = Hook: junger: t. 30. Dill: musc:



t. 70. f. 11. (*Eur: Pedem: in ericetis umbrosis subhumidis ALL: n. 2523.*). Repens sub - ramosa pallide viridis, folia late ovata horizontalia exauriculata apice acute 2-fida, stipulæ laciniatæ, theca terminalis.

\* 9. *J. ciliaris* = L. sp: 1601. non Weis: = Spr: syst: IV. 225. = Hoffm: fl: germ: II. p. 84. t. 2. *J. pulcherrima* Web: Hook: junger: t. 65. (*Eur: Pedem: in sylvis Tettonoer dictis prope Vallorsinam apud altus Faucurraies Allobrogum reperit BELLARD: app: p. 51.*). Procumbens pinnato-ramosa viridi-rubescens, folia convexa bifariam imbricata inæqualiter ovato-biloba tenuissime ciliata, stipulæ lobulatæ ciliolatæ, thecæ laterales.

\* 10. *J. Tomentella* = Ehrh: beytr: II. 150. = Spr: syst: IV. 225. = Hook: junger: t. 36. Dill: musc: t. 73. f. 35. *J. ciliaris* Weis: non L. (*Eur:, Amer: bor:, Java. Pedem: in alpibus locis humidis BALE: el: p. 5.*). Erectiuscula 2-pinnato-ramosa pallide viridis folia planiuscula bifariam imbricata inæqualiter 2-loba capillari-multifida, stipulæ sub-quadrangulares laciniatæ, thecæ axillares.

### *β Exstipulatæ.*

\* 11. *J. complanata* = L. sp: 1599. = Spr: syst: IV. 226. = Hook: junger: t. 81. Dill: musc: t. 72. f. 26. (*Eur:, Amer: bor: Pedem: ad arborum truncos ALL: n. 2527. RE fl: segus: p. 87. et fl: tor: II. p. 218. BIROLI fl: acon: II. p. 165. Sabaud: BILLET in litt: Sardin: ad truncos arborum et in terra in montibus MORIS st: sard: III. p. 17.*). Repens decomposito-

ramosissima, folia bifariam imbricata complanata horizontalia orbiculata integerrima auriculata, auricula adpressa ovata, thecæ numerosæ axillares terminalesque.

\* 12. *J. resupinata* = L. sp: 1599. = Spr: syst: IV. 226. = Hook: junger: t. 23. Dill: musc: t. 71. f. 19. (*Eur: Pedem: ad montem Cistella observavit BIROLI fl: acon: II. p. 165. Habeo ex PERRET lectam in rupe calcarea loco humidiusculo prope Aix in Sabaud: Ad rupes in montibus Sardin: MORIS st: sard: III. p. 17.*). Procumbens simpliciuscula intricata saturate viridis, folia subalterna rotundata auriculata tenuissime denticulata, thecæ terminales. Stirps non frequens et raro fructificans.

\* 13. *J. albicans* = L. sp: 1599. = Spr: syst: IV. 227. = Hook: junger: t. 25. Vaill: bot: t. 19. f. 5. Dill: musc: t. 70. f. 10.? *J. varia* L. *J. falcata* Raddi sec: Spr: (*Eur: Pedem: in sylvis ad arborum truncos ALL: n. 2526.*). Erectiuscula sub-simplex pallide ex viridi - albicans, folia inæqualiter biloba lobis medio pellucidis apice serrulatis acutis, thecæ terminales. Huc pertinet *J. lanceolata* DC. fl: fr: n. 1154. sec: MÉRAT nouv: fl: de Paris ed: 2. tom: I. p. 325. quam DC. ipse suppl: p. 205. amandavit ad var: *J. scalaris*.

\* 14. *J. undulata* = L. sp: 1598. = Spr: l. c. = Dill: musc: t. 71. f. 17. (*Eur: passim in uliginosis montosis. Sabaud: BILLET in litt.*). Erecta sub-dichotoma, folia inæqualiter biloba undulata integerrima lobis sub-rotundatis conduplicatis inferioribus majoribus, thecæ terminales.

\* 15. *J. nemorosa* = L. sp: 1598. = Spr: syst:

IV. 227. = Hook: junger: t. 21. Dill: musc: t. 71. f. 18. 19. 21. (*Eur.*; *Amer.*: bor: *Pedem.*: in sylvis montanis umbrosis ALL: n. 2525. In sylvis di *Vanzone* in valle *Anzasca* unice vidit BIROLI fl: acon: II. p. 165.). Erecta sub-dichotoma lacte viridis, folia patula inæqualiter 2-loba dentato-ciliata lobo inferiore majore obovato superiore sub-cordato obtuso, theca terminalis.

\*? 16. *J. cochleariformis* = Weis: crypt: p. 123. = Spr: syst: IV. 227. = *J. purpurea* Scop: carn: ed: 2. n. 1343. *Mnium Jungermannia* L. Dill: musc: t. 69. f. 1. (*German.*; *Britan.*: Habeo ex PERRET lectam in M. B. V. de *Oropa* ubi illam frustra quæsi). Procumbens vel repens elongata intricata simplex saturate virens, folia imbricata disticha convexa sub-rotunda apice leviter emarginata basi tenuiter auriculata margine sub-denticulata, theca terminalis. Fide cl: PERRET stirpem hanc, de qua silent Nostrates, inter pedemontanas dubitanter refero; specim: ab ipso humaniter communicata pertinent procul dubio ad *Mnium Jungermannia* L. et perfecte quadrant cum citata ic: DILL:

\* 17. *J. bicuspidata* = L. sp: 1598. = Spr: syst: IV. 227. = Hook: junger: t. 11. Dill: musc: t. 70. f. 13. (*Eur.*; *Amer.*: bor: *Pedem.*: in sylvis frequens ALL: n. 2524.). Gracillima repens ramulosa viridiuscula, folia minima quadrangularia acute 2-fida dentibus patentibus (exauriculata uti in omnibus seqq:), theca longe stipitata ex calyptra elongata truncata dentata ad basim caulis enascente.

18. *J. byssacea* = Roth: catal: II. 158. *J. bifida*



Schmid: , *divaricata* engl: bot: t. 719. , *confervoides* Raddi ( *Eur.* , *Amer.* bor: *Sardin.* in udis maritimis *Cagliari* MORIS st: sard: III. p. 17. ). Priori valde proxima , sed differt statura adhuc *minori* , foliorum dentibus *rectis* , theca *brevi* stipitata ex calyptra ad *apicem* caulis. = 19. *J. excisa* = Dicks: crypt: III. t. 8. f. 7. Hook: junger: t. 9. *J. Ehrhartiana* Web: , *brevicaulis* Raddi ( *Eur.* , *Amer.* bor: *Sardin.* in humidis *Arizzo* MORIS st: sard: III. p. 17. ). Plantam sardoam non vidi ; possideo specim: ex *Helvet.* sub nomine *J. excisæ* HOFFM: quod ex synon: in scheda adnotato videtur potius pertinere ad *J. Funckii* MOHR: Ceterum hæc et præcedentes duæ stirpes levissimis differunt notis. Cons: tamen citatos Auctores et speciatim DC. fl: fr: suppl: p. 199. 200. nn. 1151.<sup>a</sup> 1151.<sup>c</sup> et 1151.<sup>d</sup>

\*? 20. *J. julacea* = L. sp: 1601. = Spr: syst: IV. 228. = Hook: junger: t. 2. Dill: musc: t. 73. f. 38. *J. implexa* Schleich: pl: exsic: sec: DC. fl: fr: suppl: p. 204. ( *Britan.* , alpib: *Vallesicæ* sec: DC. l. c. *Pedem:* in alpibus sec: BALB: el: p. 11. ). Gracilis erecta filiformis læte viridis , folia quadrifariam imbricata ovata profunde et acute biloba superiora 4-loba , theca terminalis brevi-stipitata. *J. julacea* DC. fl: fr: n. 2170. nunc pertinet ad *J. concinnatam* LIGHTF: monente ipso DC. in suppl: p. 203. Ad hanc forsân pertinet planta BALBISH , quam hic dubitanter inter pedemonianas refero , nec umquam inveni.

21. *J. ventricosa* = Dicks: crypt: II. p. 14. = Spr: syst: IV. 228. = Hook: junger: t. 28. *J. bidentata* Schmid: non L. ( *Eur.* , *Amer.* bor: *Sardin.* ad rivules *Iglesias* MORIS st: sard: III. p. 17. ). Prostrata sub

ramosa, folia patentia concava sub-quadrata basi involuta emarginata inferiora sæpius apice 3-4-dentata; fructificationem non vidi, terminalem dicunt Auctores.

\* 22. *J. orcadensis* = Spr: syst: IV. 229. ex Hook: (Ins: *Orcad:*, *Scotia*. *Pedem:* in *M. Cenisio* ad rivulos prope lacum inventa ab ipso Hook: monente BONJEAN in litt:, qui eam quoque reperit anno 1834. commixtam cum *Bartramia fontana* var: *sulcata*). Folia obtuse 2 - dentata arcte imbricata semi-verticalia ovata margine sub - revoluta, surculi erecti simpliciusculi.

\* 23. *J. pusilla* = L. sp: 1602. = Spr: syst: IV. 229. = Hook: junger: t. 69. Dill: musc: t. 74. f. 46. *J. angulosa* Dicks:, *pygmæa* Wulff:, *Fossombronia angulosa* Raddi (*Eur:* In humidis umbrosis agri *Ligustici* in *Polcevera* Viv: fragm: fl: ital:). Omnium minima vix 2 - 3 - lin: longa prostrata sub - simplex, folia 2 - fariam imbricata horizontalia quadrata undulata obtusa crenulata, theca terminalis sub-sphærica irregulariter dehiscens. An igitur genus diversum? Cons: MÉRAT nouv: fl: de Paris ed: 3. tom. I. p. 326. in obs:

\* 24. *J. asplenoides* = L. sp: 1597. = Spr: syst: IV. 230. = Hook: junger: t. 13. Dill: musc: t. 69. f. 5. et 6. Sub *Candollea* Raddi (*Eur:* *Pedem:* ad oras sylvarum locis umbrosis et collinis ALL: n. 2520.). Adscendens ramosa elongata, folia alterna grandiuscula ovato-rotundata pellucida sub-decurrentia integerrima vel denticulato-ciliata in var: (*ciliaris* β DILL: l. c. f. 6.), theca longe stipitata e calyptra terminali oblonga compressa truncata.

\* 25. *J. lanceolata* = L. sp: 1597. = Spr: syst: IV. 231. = Hook: junger: t. 18.? Michel: gen: t. 5. f. 6. 7. *J. lanceolata* DC. fl: fr: suppl: p. 201. non fl: fr: (*Eur: Pedem: super terram in sylvis umbrosis sub-humidis ALL: n. 2522. excl: syn: DILL: BIROLI fl: acon: II. p. 164. Sardin: ad rivulos locisque umbrosis montanis Iglesias etc. MORIS st: sard: III. p. 17.*). Pumila prostrata simplex intricata lanceolata saturate viridis, folia disticha patula ovato-rotundata integerrima basi amplexicaulia, theca brevi-stipitata e calyptra terminali cylindrica apice truncata incisa. *J. lanceolata* DC. fl: fr: pertinet ad aliam stirpem; vid: supra n. 13. *J. lanceolatam* Hook: dubitanter cl: SPR: refert ad *J. sphærocarpam* ejusdem Auctoris, quæ parum differt ab *J. lanceolata* L., quæque *Sardin: etiam incolit in terra humida circa Maracalagonis* (MORIS l. c.).

## 2. Frondosæ.

### a. *Fronde enervi.*

\* 26. *J. pinguis* = L. sp: 1602. = Spr: syst: IV. 232. = Hook: junger: t. 46. Lam: ill: t. 875. f. 3. Sub *Roëmeria* Raddi (*Eur: Amer: tropic: Pedem: in fossis oryzarum BIROLI fl: acon: II. p. 166. Sardin: ad rupes madidas et in terra in montibus MORIS st: sard: III. p. 17.*). Frons decumbens valde carnosa sub-ramosa sinuata, calyptra brevis ex margine inferiore frondis apice dilatato-fimbriata, theca longiuscula stipitata.



*β Fronde nervosa.*

\* 27. *J. Blasia* = Hook: junger: t. 82. 84. = Spr: syst: IV. 232. = *Blasia pusilla* L. sp: 1605. Dill: musc: t. 31. f. 7. Lam: ill: t. 877. (*Eur: Pedem: in udis loci dicti la Molinetta in agro Taurin: ALL: n. 2531. sub Blasia pusilla*). Frons prostrata ramosa dilatata in formam rosulæ terræ infixa ope tenuissimi radicularum fasciculi subtus in rosulæ centro, fructificatio dimorpha sc: granula opaca frondi immersa, et globuli in ampulla longicollis e costa prodeunti contenti, theca abscondita sc: Spr: Ex collo ampullæ prodit demum pedicellus theca terminatus more *Jungermannia* monente Hook: Char: ex L. erat: « Masc: ? » *Cal: cylindricus granis repletus. FOEM: ? Cal: nudus, » fructu sub-rotundo foliis immerso polyspermo (L. » syst: ed: Murr: n. 1199.). » Apud DC. est: « Caps: » obliqua in fronde immersa tubo persistente coro- » nata perichætio destituta (DC. syn: fl: gall: p. 90. » n. 96.). » An igitur melius genus Linnæanum servandum sub characteribus Candolleanis? Videtur auctoritate etiam cl: MÉRAT nouv: fl: de Paris ed: 3. tom. I. p. 320. in obs: Cons: tamen DC. suppl: p. 194. qui ex observationibus Hook: plantam hanc demum ad *Jungermanniam* amandat.*

\* 28. *J. epiphylla* = L. sp: 1602. = Spr: syst: IV. 232. = Hook: junger: t. 47. Lam: ill: t. 875. f. 4. *Pellia Fabroniana* Raddi (*Eur: Pedem: in sylvis sub - humidis collium Taurin: ALL: auct: p. 50. In sylvis sub - humidis RE fl: segus: p. 87. Copiose alla*

*Molinetta* atque generatim in locis humidis ad rivulorum margines RE fl: tor: II. p. 217. Ad aquæductus præsertim secus *la Biraga* super terram copiose crescit BIROLI fl: acon: II. p. 166. *Sardin:* in terra humida et juxta fossas MORIS st: sard: III. p. 17.). Frons procumbens ovato - oblonga sub - membranacea sinuata, calyptra ex pagina superiore frondis cylindrica foliacea inciso-dentata, theca longissime stipitata. Variat frondibus elongatis, fructificatione ex margine superiore frondis (*J. longifolia* VAILL: bot: par: t. 19. f. 4. *J. Vaillantii* MÉRAT fl: de Par: ed: 2. vol. I. p. 218. *J. epiphylla* var: *longifolia* MÉRAT ed: 3. vol. I. p. 321.).

\* 29. *J. furcata* = L. sp: 1602. = Spr: syst: IV. 232. = Hook: junger: t. 55. 56. Dill: musc: t. 74. f. 45. *J. dichotoma* et *linearis* Sw.; *fruticulosa* Sm: *Riccia fruticulosa* Dicks: *Metzzeria glabra* Raddi (*Eur:*, *Amer:* bor: et tropic: *Pedem:* in *M. Cenisio* locis humidiusculis BELLARD: app: p. 52. RE fl: segus: p. 87. Ad arborum truncos et rupes in umbrosis frequens BIROLI fl: acon: II. p. 166. Habeo etiam ex *M. Mouxy* prope *Aix* in *Sabaud:* a cl: PERRET. *Sardin:* ad truncos arborum *Iglesias*, *Arizzo* MORIS st: sard: III. p. 17.). Frons prostrata linearis membranacea glabra margine integra apice bifurca, calyptra ex pagina superiore frondis 2-loba ciliata, theca brevissima stipitata.

II. MARCHANTIA Lin: syst: ed: Murr: n. 1198. excl: nonnull: stirpib: = Spr: syst: n. 3350. = Lam: ill: t. 876. = *Rebouillia*, *Fegatellæ* et *Dumortieræ* spec: nonnullæ quorund:

» *Thecæ* globosæ dependentes dentatæ sub receptaculo pedunculato lobato-radiato. *Sporæ* elateribus spiralibus sustentæ. *Gemmæ* lenticulares in receptaculis apertis denticulatis, vel pyriformes in receptaculis pedunculatis latentes. »

*Obs:* Genus a *Jungermannia* satis distinctum præsertim thecis seu capsulis pluribus receptaculo communi affixis nec solitariis; in *Jungermannii* theca ipsa est pedicellata, in *Marchantia* pedicellus sustinet receptaculum plures capsulas subtus gerens; nonne receptaculum istud simulat calyptram *Jungermanniarum*? Differentia sistit in eo quod calyptra *Jungermanniarum* est omnino sessilis, et anthesis tempore pedicellum e centro emittit capsulam solitariam gerens; receptaculum *Marchantiarum* cum pedicello e fronde exsurgit et capsulas sub-sessiles subtus tegit; hasce *evalves* dicit SPR., 4-valves indicant alii. Organa mascula vix differunt; habitu *Marchantia* magis ad *Algas* accedit; constat autem ex SPR: stirpibus 10. per orbem sparsis, EUR: præsertim et *Indias*, frondibus fere in omnibus similibus, hinc præcipue ex structura et superficie receptaculi sive fructiferi sive gemmiferi distinguendis.

\* 1. *M. polymorpha* = L. sp: 1603. = Spr: syst: IV. 234. = Dill: musc: t. 76. et 77. f. 7. Vern: *Epatica* (Per totum orbem sparsa. *Pedem:* locis udis um-



brosis et secus rivulos lente fluentes ALL: n. 2515. RE fl: segus: p. 87. et fl: tor: II. p. 215. BIROLI fl: acon: II. p. 167. *Sardin:* in humidis umbrosis frequens MORIS st: sard: III. p. 17.). Valde expansa plana lobata superne punctata, receptacula subtus glabra fructifera planiuscula longe stipitata radiatim 10-partita laciniis linearibus gemmifera brevius stipitata 8-loba lobis retundatis. Stirps sæpius dioica, unde cl: SCOP: eodem errore ductus ac MICHEL: et DILL: perperam duas distinctas species constituerat, sc: pro individuis receptacula fructifera tantum gerentibus *M. stellata* (SCOP: carb: II. p. 353., LAM: ill: t. 876. f. 2.), et pro individuis receptacula gemmifera solum referentibus *M. umbellata* (SCOP: l. c. p. 354., LAM: l. c. f. 1.).

\*? 2. *M. paleacea* = Bertol: am: ital: p. 54. = Spr: syst: IV. 234. = Michel: nov: pl: gen: p. 2. n. 4. t. 1. f. 4. (*Ital: Ligur: orient: a Borghonovo prope Clavarum* BERTOL: l. c.). Differt a priori receptaculis fructiferis conicis papillatis, laciniis convexis obtusissimis et fere truncatis, stipite crassiusculo paleis adperso, receptaculis gemmiferis sessilibus. Fide cl: BERTOL: refero hanc stirpem quam non possideo nec unquam vidi; notas excerpti ex descriptione Auctoris.

\* 3. *M. hemisphærica* = L. sp: 1604. = Spr: syst: IV. 234. = Dill: musc: t. 75. f. 2. Chevall: fl: par: II. t. 15. f. 9. Sub *Reboulia* Radd: (*Eur: N. Holl: Pedem: locis umbrosis humidis montanis frequens* ALL: n. 2516. RE fl: segus: p. 87. lisdem locis secus *Duriam* atque in collibus RE fl: tor: II. p. 216. Ad aquæductus et sepes non rara etiam in pla-

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nitie BIROLI fl: acon: II. p. 167. *Sardin:* in umbrosis humidis MORIS st: sard: III. p. 17.). Frons parvula lobata subtus rubella margine ciliata, receptacula fructifera subtus glabra hemisphærica obtuse 5-6-loba stipite apice setigero, receptacula gemmifera plana peltata stipitata.

\* 4. *M. quadrata* = Scop: carn: II. p. 355. t. 63. f. super: = Spr: syst: IV. 234. = Balb: diss: p. 5. t. 1. f. 2. Sub *Reboullia* Bertol: (*Carniol:*, *Ital:* *Pedem:* locis humidis sabulosis umbrosisque secus *Duriam* prope *la Ficca* atque in collibus inter *Revigliasco* et *l'Eremo* in udis abunde BALB: l. c. RE fl: tor: II. p. 216. Uberrime secus torrentem inter *Chaumont* et *Exilles* prope *Codizar* RE fl: segus: p. 87. Secus *Sessitem* versus *Romagnano* ubique locis umbrosis BIROLI fl: acon: II. p. 167.). Differt a priori, cui valde affinis, receptaculis fructiferis irregulariter *sub-quadratis crenato-laceris*, stipite apice *glaberrimo*. Cl: STEUD: nom: bot: p. 284. stirpem hanc enumerat tamquam solam var: sequentis.

\* 5. *M. conica* = L. sp: 1604. = Spr: syst: IV. 235. = Dill: musc: t. 75. f. 1. Vaill: bot: par: t. 33. f. 8. *Fegatella officinalis* Raddi (*Eur:*, *Amer:* bor: *Pedem:* locis rupestribus et madidis ALL: n. 2517. Circa fontes RE fl: segus: p. 87. et fl: tor: II. p. 216. Ad radices montium præsertim *di Varallo* BIROLI fl: acon: II. p. 167. *Sardin:* juxta rivulos locisque humentibus MORIS st: sard: III. p. 17.). Frons valde expansa obtuse lobata supra tenuissime verrucoso-punctata, receptacula fructifera ovato-conica sub-6-loba gemmifera sessilia plana. Stirps sæpius dioica.

III. FIMBRARIA Spr: syst: n. 3351. ex Nees: = *Marchantia* spec: Auctor:

» *Caps*: evalves calyciformes crenulatæ in calyptris  
 » multifidis pellucidis ad inferiorem paginam. *Receptacula* pedunculata. *Sem*: elateribus spiralibus affixa  
 » (Char: ex SPR:). »

*Obs*: Genus prorsus artificiale, habitu *Marchantia* simillimum, conditum a cl: NEES: AB ESENBECK pro 4. illius stirpibus, quibus quintam addidit SPR: ex planta lecta a BERTERO in *Hispaniola* (*F. elegans* SPR: *Marchantia physocarpa* BERTER:). Seqq: habemus indígenas.

\* 1. *F. tenella* = Spr: syst: IV. 236. ex Nees: = *Marchantia tenella* et *androgyna* L. sec: Spr: l. c. *M. angustifolia* Neck: meth: musc: p. 117. sec: DC. fl: fr: n. 1137. *M. androgyna* All: n. 2518. excl: syn: L. et Dill: sec: eund: DC. *M. conica* var: sec: Steud: = Michel: gen: III. t. 2. f. 3. (*Eur.*, *Amer*: bor.? *Pedem*: locis saxosis sub-humidis in valle *Aug*: *Prætor*:, in valle *Maurianens*: ALL: n. 1518. Secus *Duriam* et in pascuis *della Molinetta* RE fl: tor: II. p. 216. Secus aquæductus in uliginosis præsertim in valle *Ticini* BIROLI fl: acon: II. p. 167.). Frons submembranacea oblonga sinuata subtus villosa superne glabra impunctata, receptacula hemisphærica crenulata obsolete lobata longe stipitata. Cl: DC. l. c. monet, plantam nostram herba differre a vera *M. androgyna* L. cum qua illam quoque conjunxit SPR:; de fructificatione non loquitur, fatetur enim ipsam non vidisse; specim: mea pedemontana exhibent receptacula



non omnino *integra* uti ex brevissima L. phrasi de *M. androgyna*, sed 4-6-loba lobis rotundatis crenulatis (quod magis convenit cum phrasi L. de *F. tenella*, sc: *cal: apiculatus margine lamellis radiatus*) subtus stipiteque glabris; plantam americanam ad quam DC. putat esse referendam *M. androgynam* non vidi.

\* 2. *F. fragrans* = Spr: syst: IV. 236. ex Nees: = Sub *Marchantia* Balb: diss: t. 2. (*Ital.*, *Gallia*, *Carolina*. *Pedem:* in horto magno *Valentini* in lapidum congerie BALB: l. c., et secus *Sturam* prope *il porto dell'Abbadia* RE fl: tor: II. p. 216. Ad vias cretaceas *della Bicocca* prope urbem *Novariæ* abundat BIROLI fl: acon: II. p. 168.). Frons parva sub-coriacea supra viridis subtus atro-purpurea inæqualiter lobata lobis fructiferis emarginatis sterilibus oblongis obtusis, fructificatio e medio lobi emarginati, stipites breviusculi pilosi, receptacula convexa æqualiter et profunde 5-6-loba.

IV. GRIMALDIA Spr: syst: n. 3352. ex Raddi = *Marchantiæ* spec: Auctor:

» *Caps:* globosæ circumscissæ ad inferiorem paginam receptaculi conici subtus rimis tribus dehiscentis. *Sem:* elateribus destituta? » (Char: ex SPR: ).

*Obs:* Genus pariter artificiale habituque *Marchantiæ* simillimum, a cl: RADDI creatum pro unica stirpe seq:

\* 4. *Gr. dichotoma* = Spr: syst: IV. 235. ex Raddi = *Marchantia triandra* Scop: carn: p. 354. n. 1356.

t. 60. = Balb: diss: p. 4. t. 1. f. 1. (*Carniol., Ital: Pedem: secus Padum in horto magno Valentini et alla Molinetta* BALB: l. c. *Secus Cerundam prope Venariam* RE fl: tor: II. p. 216. *Ad Ticini declivem in humidis non frequens* BIROLI fl: acon: II. p. 167.). Frons minima (uncialis) dichotome laciniata superne punctato-aspera, receptacula fructifera ex margine frondis hemisphærico - conica sub-integra subtus tres thecas globosas sessiles tegentia; nec sporas nec receptacula gemmifera vidi in specim.; haec non memorant Auctores.

V. TARGIONIA Michel: gen: III. t. 3. = Lin: syst: ed: Murr: n. 1197. = Spr: syst: n. 3353. = Lam: ill: t. 877.

» *Theca* globosa solitaria ex duplici membrana in » receptaculo sessili sub apice frondis. *Receptac:* bi- » valve diu clausum demum dehiscens. *Sporæ* elate- » ribus catenulatis sustentæ. »

*Obs:* Genus satis determinatum pro organis foemineis, pro masculis obscurum, constans pariter unica stirpe.

\* 1. *T. hypophylla* = L. sp: 1604. = Spr: syst: IV. 235. = Dill: musc: t. 78. f. 9. Lam: ic: cit: (Per omnem terrarum orbem in humo rupium præruptarum. *Pedem:* locis aqua humectatis præsertim secus flumina non infrequens ALL: n. 2519. *Sardin:* in umbrosis collinis montanisque vulgatissima MORIS st: sard: III. p. 18.). Frons parvula oblongo-spathulata superne viridis tuberculata inferne purpurascens, thecæ membrana externa purpurea interna pellucida

basi appendice callosa instructa ; appendix hæc pro organo masculo habetur a cl: SCHREB.; quod contendit SPR: eo quod ipsa perduret sine ulla mutatione usque ad fructus maturitatem , asserens contra pro organis masculis considerata esse corpuscula eandem membranam tegentia ante fructus maturitatem marcescentia.

VI. *CORSINIA* Raddi opusc: scienz: di Bolog: vol. II. 1818. t. 1. f. 1. = SPR: syst: n. 3354. = *Ricciæ* et *Guntheriæ* spec: quorund:

» *Theca* globosa in receptaculo ad superficiem frons-  
» dis indehiscens. *Receptaculum* 2-3-valve tenuissime  
» spinulosum. *Calyptre* aggregatæ imperforatæ. *Sporæ*  
» elateribus destitutæ. »

*Obs:* Genus fructificatione propria hinc *Targioniæ* illinc *Ricciæ* accedens, constans sola specie sequenti.

\* ? 1. *C. marchantioides* = Raddi l. c. = SPR: syst: IV. 336. = Michel: nov: gen: 106. t. 57. f. 1. Dill: musc: t. 78. f. 15. (*Italia, Gallia* in sylva de *Montmorency* MÉRAT nouv: fl: de Paris ed: 3. vol. I. p. 318. *Sardin:* in udis frequens MORIS st: sard: III. p. 17.). Frondes 2-3-lobatæ planæ in rosulam dispositæ. Specim: habeo tantum ex *Sardin:*; nec Nostrates nec cl: DC. hanc plantam memorant.

VII. *ANTHOCEROS* Lin: syst: ed: Murr: 1201. = SPR: syst: n. 3355. = Lam: ill: t. 876.

» *Theca* linearis 2-valvis longitudinaliter debi-  
» scens, placentam capillarem (*columella*) intus fovens,  
» basi calyprata. *Sporæ* elateribus dimorphis sustentæ.



» *Gemmulæ* (organa mascula?) in frondem sparsæ  
 » lenticulares 3-6. corpuscula annulo articulato cincta  
 » includentes. »

*Obs:* Genus structura organi foeminei præsertim distinctissimum, constans 2-3. stirpibus.

\* 1. *A. lævis* = L. sp: 1606. = Spr: syst: IV. 236. = Lam: ic: cit: f. 1. Dill: musc: t. 68. f. 2. (*Eur: Pedem:* in sylvis collium *Taurinens:* ALL: n. 2533. In nemore vineæ *Morozzo* ac ad margines viæ umbrosæ prope ipsam sitæ RE fl: tor: II. p. 215. *Sardin:* in humidis montanis MORIS st: sard: III. p. 17.). Frons indivisa plana lævis margine sub-undulata saturate viridis. Huc pertinet *A. bulbosus* BROT: sec: STEUD:

\* 2. *A. punctatus* = L. sp: 1606. = Spr: syst: IV. 236. = Lam: ic: cit: f. 2. Dill: musc: t. 68. f. 1. (Per omnem terrarum orbem SPR: *Pedem:* ad margines agrorum *Ciliani* secus fossas in regione dicta *il Molinetto* BELLARD: app: p. 52. *Sardin:* in humidis montanis MORIS st: sard: III. p. 17.). Differt a priori statura minori, colore ex viridi *flavescente*, fronde *sinuato-crispa* superne *punctata*. Variat fronde profundius sinuata (*A. multifidus* L.), vel evidentius crispa (*A. crispus* SW.). Huc referendus quoque *A. carolinianus* MICHX: sec: STEUD:

VIII. SPHÆROCARPUS Michel: gen: IV. t. 3. f. 2. non Bull: = Spr: syst: n. 3358. = *Targionice* spec: quorund:

» *Theca* globosa in receptaculo supra frondis su-

» perficiem. *Receptac*: pyriforme 1-valve apice perforatum. *Sporæ* elateribus destitutæ. »

*Obs*: Genus *Targionia* proximum, constans unica stirpe. *Sphærocarpus* BULL: pertinet ad *Mycetes gastromycetes*.

\* 1. *Sph: terrestris* = Michel: l. c. = Spr: syst: syst: IV. 236. = Engl: bot: t. 299. *Sph: Michelii* Bellard: app: p. 52. *Targionia Sphærocarpos* Dicks: crypt: II. p. 8. Dill: musc: t. 78. f. 17. (*Ital*., *German*: med:, *Gallia*. *Pedem*: in arvis inter *l'Ergastolo* et *la Molinetta* BELLARD: l. c. BALB: fl: taur: p. 183. sub *Targionia Sphærocarpos*. RE fl: tor: II. p. 215. sub *Sphærocarpo Michelii*). Plantula vix 2-linearis fronde sub-orbiculata apice truncata pellucida superne glomeratim fructifera.

IX. *RICCIA* Lin: syst: ed: Murr: n. 1200. = Spr: syst: n. 3359. = Lam: ill: t. 877.

» *Thecæ* sub-globosæ in ipsa frondis superficie  
» superiore nidulantes apice demum poro hiantes.  
» *Receptac*: o. nisi cavitatem vesicularem intra frondis substantiam pro ipso habeas. *Sporæ* elateribus  
» destitutæ sub-angulatæ. *Gemmulæ* (organa mascula?) versus marginem frondis sessiles conoidæ apice  
» truncatæ ibique dehiscentes corpusculis granulosis  
» repletæ. »

*Obs*: Genus constans 10-12. stirpibus fere omnibus europæis valde inter se similibus et ideo nonnullis forsân solis varr: , frondibus planis plus minus expansis plerumque in rosulam diverse sectam dispositis.

\* 1. *R. pyramidata* = W. bot: mag: IV. p. 9. = Spr: syst: 4. 236. *R. cavernosa* Hoffm: germ: II. p. 95. = *R. cristallina* Schweed: ic: t. 45. f. 5. non L. Dill: musc: p. 535. t. 78. f. 16. (*Eur: Pedem: secus Duriam prope locum dictum le Fusine abunde* RE app: I. p. 40. et fl: tor: II. p. 214. sub *R. cavernosa. Sardin: in limo circa stagna la Maddalena Cagliari* MORIS st: sard: III. p. 18. sub *R. pyramidata*). Frons radians ciliata radiis apice bifurcis, thecæ sub-pyramidatæ emergentes. Sæpe confusa cum seq:

\* 2. *R. crystallina* = L. sp: 1605. = Spr: syst: IV. 236. = Lam: ill: t. 877. f. 3. (*Eur: Pedem: BALB: el: p. 7. Sardin: ad vias umbrosas irriguas Iglesias* MORIS st: sard: III. p. 17.). Differt a priori præsertim fronde evidentius *papillosa*, thecis *immersis*.

3. *R. lamellosa* = Spr: syst: IV. 236. ex Raddi (*Etruria. Sardin: in umbrosis humidis circa Caralin frequens* MORIS st: sard: III. p. 17.). Magis accedit ad *crystallinam*, sed fronde *sulcata* subtus *lamellosa* diversa.

\* 4. *R. ciliata* = Hoffm: germ: II. p. 95. = Spr: syst: IV. 236. = Mich: gen: t. 57. f. 5. *R. glauca* var: Poir: dict: VI. p. 198. (*Eur: passim. Pedem: BALB: el: p. 7. Sardin: in umbrosis montis S. Joannis Iglesias* MORIS st: sard: IV. p. 17.). Glauca, frondes lineares obtusæ dichotomæ parum concavæ margine ciliatæ sub lente tenuissime punctatæ.

\* 5. *R. glauca* = L. sp: 1605. = Spr: syst: IV. 236. = Fl: dan: t. 898. f. 1. Lam: ill: t. 877. f. 4. (*Eur: passim, Pedem: secus fossas in proximis col-*



libus *Taurin*: ALL: auct: p. 50. n. 2532. In pascuis sterilibus arenosis secus flumina RE fl: segus: p. 87. In pascuis *della Molinetta* RE fl: tor: II. p. 214.). Vix a priori diversa undique *glabra* nec *ciliata*.

\* 6. *R. minima* = L. sp: 1605. = Lam: ill: t. 877. f. 2. = *R. glauca* var: Spr: syst: IV. 236. Mich: gen: t. 57. f. 6. (*Eur*: passim. *Pedem*: ad litora *Padi* prope pontem *Montiscalerii*, et in valle *Pisii* supra *Carthusiam* locis humidis BELLARD: app: p. 53. *Alla Molinetta* RE fl: tor: II. p. 214. *Sardin*: in limo circa stagna *la Maddalena Cagliari* MORIS st: sard: III. p. 17. pro var:  $\beta$  *majori* RADDI). Vix a præcedenti distincta frondibus *acutis*, varians statura majori vel minori semper tamen ceteris tenuiori.

\* 7. *R. fluitans* = L. sp: 1606. = Spr: syst: IV. 536. = Dill: musc: t. 74. f. 47. (*Eur*: *Pedem*: in fossis circa lacum *di Viverone* ALL: n. 2532. In aquis *della Molinetta* RE fl: tor: II. p. 214. In aquis stagnantibus, in oryzi frequens BIROLI fl: acon: II. p. 168.). *Fluitans* in aquis stagnantibus, frons membranacea plana læte viridis lineari-filiformis, repetitodichotoma laciniis divergentibus obtusis apice subcallosis.

8. *R. papillosa* = Moris app: ad el: st: sard: et st: sard: III. p. 18. (*Sardin*: circa stagna maritima, *Cagliari alla Maddalena* locis limosis MORIS l. c.). Species papillis in fronde confertis a ceteris facile distinguenda sec: MORIS l. c. Omnes tamen et præsertim *R. crystallina* n. 2. plus minus papillosæ saltem sub vitro adparent.

Obs: geographica circa *Hepaticas*.

*Hepaticæ* per orbem sparsæ circiter . . . 250

*Hepaticæ* pedemontanæ.

<i>Jungermannia</i>	.	.	.	.	.	.	.	21
<i>Marchantia</i>	.	.	.	.	.	.	.	5
<i>Fimbraria</i>	.	.	.	.	.	.	.	2
<i>Grimaldia</i>	.	.	.	.	.	.	.	1
<i>Targionia</i>	.	.	.	.	.	.	.	1
<i>Corsinia</i>	.	.	.	.	.	.	.	1
<i>Anthoceros</i>	.	.	.	.	.	.	.	2
<i>Sphærocarpus</i>	.	.	.	.	.	.	.	1
<i>Riccia</i>	.	.	.	.	.	.	.	6
								<hr/> 40

Et sic sextam fere partem constituunt.

## CLASSIS II.

## A P H Y L L Æ

(DC. th: élém: p. 220. = *Homonemea* Bartl:  
ord: nat: p. 4.)

*Char: essentialis.*

» *Expansiones* folia non simulantes. Sexus non  
» adparens (*cellulæ* irregulares anomalæ, *sporidia*  
» germinantia in filum homogeneum elongata Bartl:  
» l. c.). »

*Subclassis I.*

## Lichenes.

(Spr: syst: IV. p. 237. = Achar: meth: lichen:  
Holm: 1808. = Ejusd: Lichenogr: univ: Gott:  
1810. = Meyer Nebenst: mein: Gott: 1825. =  
Bartl: ord: nat: p. 7. = Fries: Lichen: europ:  
reform: = *Algarum* sect: II: Juss: = *Lichen*  
genus unicum L.)

*Char: essentialis.*

» *Thallus* (corpus ipsum *Lichenis* demptis fructi-  
» ficationis simulacris) arhizus acaulis perennans po-  
» limorphus, sc: modo crustæformis simplex vel ef-



» figuratus , nunc foliaceus seu lobatus , quandoque  
 » ramosus laciniatus , duplici constans substantia ;  
 » exteriori ( *stratum corticale* ) duriore homogenea ,  
 » corpuscula ( *gongyli* ) minutissima sparsa vel nidu-  
 » lantia proligeri gemmarum ad instar referente ;  
 » interiori ( *stratum medullare* ) molliori vasculosa fi-  
 » brosa fibris paralellis tubulosis simplicibus , gon-  
 » gylis quoque interdum exhibente. *Thallus* ipse fere  
 » semper evolvitur in receptacula partialia ( *apothecia* , *fructificatio* quorund:) sæpius per ætatem a  
 » thalli indole , colore et substantia adparenti præ-  
 » sertim inspectis , discrepantia , constantius crebrius-  
 » que quam thallus gongylifera , figura et structura  
 » varia , sessilia vel pedunculo ( *podetium* ) sustenta ,  
 » in laminam vel nucleum proligerum gongylos , cel-  
 » lulis et vesiculis ( *thecæ sporangia* HEDW:) quan-  
 » doque intermixtis , gerentes prodeuntia. Insuper e  
 » thalli substantia corticali excrescunt sæpe apothecia  
 » accessoria ( *cephalodia* , *cyphulæ* , *pulvinuli* , *soredia* )  
 » forma et colore varia similiter sed parcius gongy-  
 » lifera. »

*Obs:* Vegetabilia transitum facientia ab *Hepaticis* ad *Algas* , quarum partem constituebant sub unico *Lichenis* genere a D. LINNÆO , nonnulla *Fungis* magis affinia , nunc recte præsertim ex substantia qua componuntur et habitu in classem propriam circumscripta. *Lichenes* omnes extra aquam in terra nuda , ad lapides , ad arborum cortices , ad ligna sicca , uti *Fungi* , nec umquam sub aqua *Algarum* more , præcipue vigent , locis opacis humidisque degenerant , tamen nonnisi humectati crescunt , formas innumeras simulant ,

unde eorum determinatio, immo distributio ipsa, organis fructificationis proprie dictis deficientibus vel saltem nondum detectis, vacillans evadit; proinde variæ *Lichænum* methodi ab Auctoribus propositæ pro varia eorum opinione ac videndi ratione. Omnes tamen conveniunt, characteres primarios ab indole *apotheciorum* utpote fructificationem quodammodo simulantium præcipue desumendos esse, secundarios autem ex thalli figura ac substantia, ejusque diversis modificationibus. Methodus a cl: MEYER (l. c.) exhibita, quam secuti sunt, paucis mutatis, cl: BARTL: et SPR:, facilior mihi visa fuit. Ad Lichenes sabaudos quod spectat, plurima specimina ac nova mihi humaniter exhibita fuerunt a Reverend: Diœcesis Maurianensis Episcopo A. BILLET de Botanica et *Cryptogamia* præsertim optime merito.

## ORDO CCI.

## PYRENOTHALAMI

(Bartl: ord: nat: p. 8. = *Lichenes myelocarpi*  
Meyer l. c. = *Angiospori myelocarpi* Spr: syst: IV.  
p. 237.)

*Char: essentialis.*

- » *Nucleus* proligerus apothecio vel thallo inclusus.
- » *Asci sphorophori* sub-deliquestescentes. »

*Obs:* Thallus membranaceus vel crustaceus horizontalis strato inferiori arcte adhærens. Genera ex SPR: 10.

I. ENDOCARPON Ach: lichen: univ: n. 12. tab: IV. f. 5.  
 6. 7. = Spr: syst: n. 3360. = *Lobaricæ* spec: Hoffm:  
 (Inter *Gasterothalamos* cl: III., *Verrucarias* ord: I.  
 Fries).

» *Apothecium* sub-globosum thallo immersum,  
 » *perithecio* membranaceo diaphano simplici, *ostio*lo  
 » punctiformi in superficie patula. *Nucleus* globosus  
 » sub-similaris vel celluliferus. »

*Obs:* Genus constans ex Ach: 20., ex Spr: 12. stirpibus.

\* 1. *E. miniatum* = Ach: l. c. p. 302. = Spr: syst: IV. 239. Sub *Lichene* L. sp: 1617. aliique. = Jacq: misc: II. t. 10. f. 3. Dill: musc: t. 30. f. 127. (*Eur.*, *Asia*. *Pedem:* in rupibus alpium locis umbrosis passim ALL: n. 2570. sub *Lichene*. Nihil frequentius circa *Segusium* supra rupes ab aquis interdum irriguas RE fl: segus: p. 88. sub eod: In rupibus alpinis frequens BIROLI fl: acon: II. p. 178. *Sabaud:* BILLET in litt: *Sardin:* ad rupes in montanis MORIS st: sard: III. p. 19.). Majusculum sub-rotundum crustaceo-cartilagineum margine undulatum superne albocinascens ibique punctis tenuissimis excavatis crispis notatum, subtus rubens demum nigrescens. Huc tamquam varr: nonnullæ species referuntur a SPR:, inter quas *E. Weberi* Ach: l. c. p. 304. a cl: RE lectum ad rivulos supra lapides alpium *Monregalensium* (app: II. p. 209.). Ab illis tamen stirps sequens certe excludenda.

\* 2. *E. complicatum* = Ach: l. c. p. 303. = Sub *Lichene* Ach: lich: succ: 142. = *L. polyphyllus* Jacq:



coll: II: p. 290. t. 16. f. a i. Ach: lichen: univ: t. IV. f. 7. (Cum priori BIROLI fl: acon: II. p. 178. *Sabaud: BILLET* in litt: ). Differt a præcedenti, cui valde affine, statura *minori*, thallo *complicato-subimbricato*, punctis *elevatis* nec excavatis.

\* 3. *E. pallidum* = Ach: lichen: univ: p. 301. = *E. pusillum* var: Spr: syst: IV. 239. = Ic: ? (*Pedem: supra tellurem prope urbem Montisregalis RE app: II. p. 209.*). Thallus sub-coriaceus foliaceus laciniatus pallide sub-virescens laciniis imbricatis flexuosis incisis crenatisque exterioribus subtus nudis albo-palescentibus.

\* 4. *E. Hedwigii* = Ach: meth: 125. = *E. pusillum* var: Spr: l. c. = Hedw: st: crypt: t. 20. f. A (Ad terram et saxa arenaria et calcaria. *Sabaud: BILLET* in litt: ). Thallus depressus sub-rotundus angulari-lobosus coriaceo-squamulosus brunneus aut virescens subtus pallidus dein nigricans ostiolis protuberantibus atris.

II. ANTROCARPUM Spr: syst: n. 3362. ex Meyer = Sub  
*Thelotrema* Ach: lichen: univ: p. 312. tab: VI.

» *Apothecium* verruciforme in thallo excavatum,  
» thalamium membranaceum irregulariter rumpens  
» includens. *Nucleus* gelatinoso-ceraceus coloratus. »

*Obs:* Genus constans 1-2. stirpibus in cortice arborum *Eur:* et *Amer:* austr: vigentibus.

\* 1. *A. inclusum* = Spr: syst: IV. 240. = *Thelotrema lepadinum* Ach: lichen: univ: p. 312. = *Lichen inclusus* Engl: bot: t. 678. (*Pedem: in cortice arborum vulgare. In sylvis della Mandria supra cor-*

ticem quereuum RE fl: tor: II. p. 229. sub *Thelotrema lepadino*). Crusta contigua cartilagineo-membranacea sub-albida vel glauco-virens, verrucæ sub-conicæ inde carneo-fuscæ.

III. POROPHORA Spr: syst: n. 3363. ex Meyer: = Sub *Porina* Ach: lichen: univ: p. 308. tab: VII. f. 1. 2. = *Pertusariæ*, *Variolariæ*, *Isidii*, *Thelotremæ* spec: nonnullæ quorund:

» *Apothecium* verruciforme a thallo formatum,  
 » thalamia plura perithæcio tenerrimo obducta in-  
 » cludens, ostiolis impressis supra notatum. *Nuclei*  
 » sub-globosi celluloso-vesiculiferi. »

*Obs:* Genus constans ex SPR: stirpibus 17. in cortice arborum raro supra saxa nascentibus, quarum major pars exotica.

\* 1. *P. pertusa* = Spr: syst: IV. 241. = Sub *Porina* Ach: lichen: univ: p. 308. *Lichen pertusus* L. aliique. = Fl: dan: t. 766. *Pertusaria communis* DC. fl: fr: n. 873. (In cortice arborum et in saxis *Eur:* fere totius. *Pedem:* in rupibus communis *ALL:* add: n. 2537. sub *Lichene*. Supra saxa in locis montanis RE fl: segus: p. 87. sub eod: In cortice *Fagi sylvaticæ* in collibus *Taurin:* prope *Supergam* RE fl: tor: II. p. 229. sub *Porina*. Prope *Venariam* ad arborum truncos RE fl: tor: II. p. 230. sub *Variolaria communi*. In cortice *Fagi BIROLI* fl: acon: II. p. 169. sub *Variolaria faginea*. *Sabaud:* BILLET in litt: sub ead: *Sardin:* ad arbores et saxa MORIS st: sard: III. p. 22. sub *Variolaria communi* et *amara*). Thallus

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crustaceus lævigatus cinarescens, verrucæ sub-globosæ ostiolis aggregatis nigris pertusis. Variat multimode per ætatem et locum natalem. Huc pertinet sec: SPR: *Lichen corallinus* L. (*Isidium corallinum* ACH: lichen: univ: p. 575.) inventus a BELLARDI in rupibus schisteis supra *Mompantero* (app: p. 56. RE fl: segus: p. 90.), formam mutans ex impedita sporocarpiorum molitione monente cl: MEYERO. *Variolaria communis* (ACH: l. c. p. 322.) cum varr: pertinet similiter ad *Porophoram pertusam*; inter hasce memorat ALL: *Lichenem fagineum* L. vulgatissimum ad rimas arborum locis montanis (ALL: n. 2541. RE fl: segus: p. 87.). *Isidium phymalodes* ACH: l. c. p. 578. ad corticem Fagi non raro occurrens sec: BIROLI fl: acon: II. p. 179. ab *I. corallino* vix distinguitur crusta pallide sulphurea, ostiolis luteo-fuscescentibus. Huic quoque proximum videtur *Isidium mamillosum* MORIS app: ad cl: st: sard: III. p. 19.; gaudet tamen podetiis multo crassioribus, apotheciorum lamina purpurea; habitat ad rupes vulcanicas in summo monte *Punta della Trebina*. Huc videtur quoque referenda *P. Wulfenii* DC. fl: fr: n. 874. *P. chionæa* ejusdem Auctoris est species distincta, nec crescit in *Pedem*: quod sciam.

IV. VERRUCARIA Pers: apud Uster: in ann: d: Bot: = Spr: syst: n. 3367. = *Verrucariæ* et *Pyrenulæ* spec: Ach: lichen: univ: p. 274. 314. tab: V. (Inter *Gasterothalamos* cl: III., *Verrucarias* ord: I. Fries).

» *Apothecium* sub-globosum vel hemisphæricum.



» *Sporangium* proprium carbonaceum basi thallo in-  
 » natum papilla vel ostiolo instructum. *Sporæ* in nu-  
 » cleo gelatinoso hyalino (Char: ex SPR:). »

*Ols:* Genus constans 60. circiter stirpibus, inclusa  
*Pyrenula*, quarum permultæ obscuræ et exoticæ.

\* 1. *V. punctiformis* = Ach: lichen: univ: p. 274.  
 = Spr: syst: IV. 246. = *Lichen Analeptus* Engl:  
 bot: t. 1848. (Ad cortices arborum *Eur:*, *Amer:*  
*trop:* *Pedem:* in agro *Taurin:* frequens supra corticem  
*Populi albæ* RE fl: tor: II. p. 227. sub *V. epidermi-*  
*dis*. Habeo ex BERTER: lectam *Albæ* pariter in cortice  
*Populi albæ*). Crusta tenuissime lævigata cinerescenti-  
 fusca, apothecia minutissima plus minus conferta sub-  
 globosa punctiformia, nucleus globosus albus. *V. epi-*  
*dermidis* Ach: l. c. p. 276. videtur diversa a planta  
 RE et forsán eadem quam tradit BIROLI fl: acon: II.  
 p. 177. vigere in tenera epidermide *Betulæ albæ*.

\* 2. *V. Cerasi* = Ach: lichen: univ: p. 276. =  
*V. punctiformis* var: Spr: syst: IV. 246. *Lichen elli-*  
*pticus* Ach: lichen: suec: = Ic: ? (*Eur:* passim in  
 cortice *Pruni*, *Cerasi* et *Quercus*. *Pedem:* in cortice  
*Pruni Cerasi* vulgaris BIROLI fl: acon: II. p. 178.).  
 Differt a priori, cui valde affinis, crusta *argenteo-*  
*plumbea*, apotheciis *sub-ellipticis*, nucleo *compres-*  
*siusculo*.

\* 3. *V. olivacea* = Pers: apud Uster: in ann: d.  
 Bot: st: 7. p. 28. tab: III. f. 6. B a b = Spr: syst:  
 IV. 246. = *V. analepta* et *carpineæ* Ach: lichen:  
 univ: p. 275. 281. *Lichen analyptus* Ach: lichen: suec:  
 (*Eur:* ad cortices arborum. *Pedem:* supra arborum  
 cortices prope *Venariam* RE app: II. p. 209. et fl:

tor: II. p. 223. sub *V. carpineae*). A præcedentibus, quibus similis, differt apotheciis *majoribus conoideis*, nucleo *valde compresso*, demum crustæ colore variante plus minus ex olivaceo-fuscescente.

\* 4. *V. alba* = Schrad: spicil: fl: germ: p. 109. t. 2. f. 3. = Spr: syst: IV. 246. = *V. gemmata* Ach: lichen: univ: p. 278. tab: IV. f. 2. *Lichen melaleucus* Ach: lichen: succ: (*Eur: ad corticem arborum. Pedem: retro il Parco della Veneria* RE app: I. p. 47. et fl: tor: II. p. 227. BIROLI fl: acon: II. p. 178. ambo sub *V. gemmata*). Crusta effusa tenuis lævigata albido-incana, apothecia sparsa hemisphærica papillata nitida, nucleus globosus hyalinus. Variat crusta crassiori omnino alba, et tenuiori incano-glaucescente.

\* 5. *V. umbrina* = Spr: syst: IV. 244. = *V. mucosa*, *umbrina*, *maura*, *æthiobola*, *aractina* et *striatula* Ach: lichen: univ: p. 282. 291. 292. 293. = Ic: ? (*Eur: in rupibus et saxis. Pedem: in summo monte Musinè supra lapides* RE app: II. p. 209. et fl: tor: II. p. 228. sub *V. mucosa*). Crusta tartarea rimosa umbrina nigrescens, apothecia minuta sub-rugosa depressa papillata, nucleus albus. Variat modis indicatis ab Ach: II. cc. Planta RE quadrat cum descr: Ach: de *V. muscoso*.

\* 6. *V. muralis* = Spr: syst: IV. 245. ex Ach: = *V. calciseda* DC. (*Ad muros dealbatos Sabaud: BILLET in litt.*). Crusta alba, apothecia immersa subglobosa intus nigricantia.

\* 7. *V. Schraderi* = Ach: lichen: univ: p. 284. = Spr: syst: IV. 245. = *V. rupestris* Schrad: spicil:





## ORDO CCII.

## HYMENOTHALAMI

(Bartl: ord: nat: p. 8. = *Hymenocarpi* Meyer  
l. c. = *Angiospori hymenocarpi* Spr: syst: IV.  
238.)

*Char: essentialis.*

» *Lamina* proligera aperta thallo adnata. *Asci*  
» sporophori persistentes. »

*Obs:* Thallus varius. *Lamina* proligera nunc elongata nunc sub-rotunda. Genera ex SPR. 11. in duas sectiones ex forma laminæ divisa.

A *Lamina* proligera elongata.

I. GRAPHIS Spr: syst: n. 3370. ex Adans: = *Opegraphæ*  
et *Graphidis* spec: Ach: lichen: univ: p. 43. et 46.  
tab: III. = *Verrucariæ*, *Lecideæ*, *Arthoniæ* et  
*Spilomæ* spec: nonnullæ quorund:

» *Apothecia* (*lisellæ* SPR:) simplicia vel compo-  
» sita. *Lamina* proligera marginibus paralellis apo-  
» theciorum excepta. *Sporæ* e disco canaliculato vel  
» impresso propullulantes. »

*Obs:* Genus constans ex SPR: 66. stirpibus varie  
divisis ex apothecii colore et structura, inter quas  
vix quinta pars in corticibus arborum europæarum  
vigens, ceteræ exoticæ speciatim in corticibus arbo-  
rum tropicalium.

\* 1. *Gr: vulvella* = Nob: = Sub *Opegrapha* Ach: lichen: univ: p. 251. = *Lichen vulvella* Ach: meth: t. 1. f. 9. *Graphis curvula* var: Spr: syst: IV. 249. (*Eur: ad cortices arborum. Pedem: prope Venariam supra corticem Alni glutinosæ* RE app: II. p. 208. et fl: tor: II. p. 226. sub *Opegrapha*. In epidermide *Betulæ albæ* non rara BIROLI fl: acon: II. p. 170. sub ead:). Crusta sub-pulverulenta tenuis sub-rugosa alba vel cinerea, apothecia minuta simplicia nigra sparsa oblongo-elliptica concava cymbiformia disco nudo vel albo-pruinoso.

\* 2. *Gr: notha* = Nob: = Sub *Opegrapha* Ach: lichen: univ: p. 252. tab: III. f. 12. = *Graphis curvula* var: Spr: syst: IV. 249. (*Eur: ad caudices Ulmi vetustos. Pedem: prope Venariam supra Alnum glutinosam* RE app: II. p. 208, et fl: tor: II. p. 226. In cortice *Ulmorum delle grazie prope Novariam* BIROLI fl: acon: II. p. 176. omnes sub *Opegrapha*. Habeo etiam a valle *Pisii supra Chartusiam* lectam a CUMINO ad corticem *Pini*). Parum differt a priori, cujus var: cum aliis stirpibus habetur a SPR: sub *Gr: curvula*, crusta sub-leprosa, apotheciis sub-rotundis difformibus, disco plano demum convexo margine sub-evanescente.

\* 3. *Gr: macularis* = Spr: syst: IV. 250. = Sub *Opegrapha* Ach: lichen: univ: p. 247. = Pers: apud Uster: in ann: d. bot: st: 7. p. 155. t. 3. f. 4. A a sub *Opegrapha conglomerata* (*Eur: in cortice arborum. Habeo ex Sabaud: ad corticem Quercus Roburis* lectam a PERRET prope *Aix*. In *Mauriana* BILLET in litt: pro var: *faginea*). Crusta tenuis rugulosa fusco-

atra demum nigerrima, apothecia minutissima conferta sub-rotunda disco rimæformi. Huc pertinent *Opegrapha quercina*, *conglomerata*, et *faginea* PERS: An idem dicendum de *Lichene rugoso* L., quem frequenter nasci in corticibus Fagi testatur ALL: n. 2538., valde dubito; de illo mentionem non faciunt Auctores posteriores excepto STEUD: cum dubitationis signo; figura DILL: ab ALL: citata mala; synon: HALL: n. 2077. spectat reapse ad *Graphim macularem* sec: STEUD: Plantam non vidi.

\* 4. *Gr: stenocarpa* = Spr: l. c. = *Opegrapha radiata* Pers: in Ust: ann: st: 7. t. 2. f. 3. = *O. astroidea* Ach: syn: 6. (In cortice arborum *Sabaud: BILLET* in litt: sub *O. radiata*). Crusta membranacea determinata tenuissima lævigata aut sub-rimosa albida vel cinascescens, apothecia adpressa sub-stellata difformia.

\* 5. *Gr: herpetica* = Spr: syst: IV. 250. = Sub *Opegrapha* Ach: lichen: univ: p. 248. tab: III. f. 9. = Sub *Lichene* Ach: lich: suec: (*Eur: in cortice arborum. Pedem: in cortice Populi tremulæ BIROLI* fl: acon: II. p. 170. sub *Opegrapha*). Crusta membranacea scabra rimulosa rigulosa cinereo-fusca vel fuscorufescens, apothecia minuta conferta adpressa convexa sub-rotunda vel longiuscula flexuosa simplicia vel sub-ramosa disco sub-canaliculato. Huc referenda sec: SPR: *Opegrapha rubella* et *rimalis* Ach: l. c. p. 249. 260.

\* 6. *Gr: atra* = Nob: = Sub *Opegrapha* Pers: in Ust: ann: 7. p. 30. t. 1. f. 2. = Spr: syst. l. c. (Ad saxa et corticem arborum. *Sabaud: BILLET* in



litt: sub *Opegrapha*). Crusta sub-orbicularis membranacea determinata effusa alba interdum cinascentisordida, apothecia sessilia linearia libera flexuosa inordinatim vel stellatim disposita disco canaliculato marginibus prominulis.

\* 7. *Gr: scripta* = Ach: lichen: univ: p. 265. = Spr: syst: IV. 252. = Sub *Lichene* L. sp: 1606. Hoffm: enum: lichen: t. 3. f. 2. 6. (*Eur: ad corticem lævem in ramis arborum et fruticum. Pedem: in corticibus arborum vulgaris* ALL: n. 2535. RE fl: segus: p. 87. sub *Lichene* et fl: tor: II. p. 227. sub *Graphide*. BIROLI fl: acon: II. p. 170. sub *Opegrapha*). Crusta membranacea lævigata sub-nitida ex albo cinascentis vel olivaceo varians, apothecia linearia nuda flexuosa simplicia vel ramosa sub-conferta nigra disco rimæformi. Variat modis indicatis ab Ach: l. c. Huc pertinet *Opegrapha pulverulenta* PERS: quæ crescit etiam in *Sabaud: sec: BILLET* in litt:

\* 8. *Gr: Cerasi* = Ach: lichen: univ: p. 268. = *Gr: scripta* var: Spr: syst: IV. 252. = Ic: ? (*German:; Helvet: ad corticem Pruni. Pedem: in cortice Pruni Cerasi* aliarumque arborum abundans RE fl: tor: II. p. 227. BIROLI fl: acon: II. p. 170. sub *Opegrapha*). Vix differt a priori, cujus probabilius var: , crusta incano-glauescente, apotheciis rectis sæpius simplicibus, disco canaliculato sub-pruinoso.

## B Lamina proligera sub-rotunda.

- II. LECIDEA Spr: syst: n. 3374. = *Lecideæ* et *Gyrophoræ* spec: Ach: lichen: univ: p. 32. et 36. tab: II. = *Verrucariæ*, *Collema*, *Platellariæ*, *Trachyliæ*, *Circinariæ*, *Psoræ*, *Bæomyces*, *Umbellicariæ* spec: paucæ quorund: (Inter *Gasterothalamos* cl: III. *Lecideas* ord: II. Fries ).

» *Apothecium* orbiculatum marginatum plano-con-  
 » vexum sessile, totum membrana cartilaginea atra  
 » tectum, disco æquabili (in *Lecidea*), plicato-gyroso  
 » (in *Gyrophora*). *Gongyli* intra substantiam apothecii  
 » nidulantes nudi. »

*Obs:* Genus numerosissimis constans stirpibus (*Lecideæ* 123., *Gyrophoræ* 18. ex Ach: ad 100. circiter redactæ a Spr:), et ideo extricatu pro ipsis difficillimum, ex thalli substantia in tres sectiones opportune divisum, sc: *thallo crustaceo uniformi* ( *Catillaria* ); *thallo crustaceo figurato* ( *Lepidomata* ); *thallo foliaceo membranaceo peltato disco plicato-gyroso* ( *Gyrophoræ* ). Ex apothecii ( *patellæ* in hoc genere Spr:) et crustæ colore optimæ eruuntur etiam sub - divisiones. Permultæ europææ.

A *Catillaria* (Ach: l. c. p. 153.).

\* 1. *L. atrovirens* = Ach: lichen: univ: p. 163.  
 = Spr: syst: IV. 256. *Lichen atrovirens* et *geographicus* L. sp: 1607. = Hoffm: pl: lich: t. 17. f. 4.  
 pro *Lichene atrovirente* et t. 53. f. 6. t. 54. f. 2.

pro *Lichene geographico*. Dill: musc: t. 18. f. 5. (Ad saxa et rupes *Eur*: et *Amer*: *Pedem*: frequens in saxis ALL: n. 2536. RE fl: segus: p. 87. ambo sub *Lichene geographico*. RE fl: tor: II. p. 221. sub *Lecidea geographica*. In alpihus di *Monastero* RE app: II. p. 207. sub *L. atrovirente*. *Sabaud*: BILLET in litt: sub *Rhizocarpo geographico*. *Sardin*: ad saxa rupesque MORIS st: sard: III. p. 20.). Crusta effusa tenuis atra areolis secundariis convexiusculis (in var:  $\gamma$  *gerontica*) vel planis (in var:  $\beta$  *geographica*) flavo-virentibus vel luteis, apothecia planiuscula intus concoloria.

\* 2. *L. atro-alba* var: *Oederi* = Spr: syst: IV. 255. = *L. Oederi*  $\gamma$  Web: *L. silacea* et *Dicksonii* Ach: lichen: univ: p. 164. 165. *Lichen Oederi* Ach: meth: lich: p. 49. = Fl: dan: t. 470. f. 1. (Ad rupes *Eur*: *Sabaud*: BILLET in litt: sub *Patellaria silacea*). Crusta primaria atra areolis secundariis albicantibus, apothecia atra plana sub-confluentia.

\* 3. *L. fumosa* = Ach: lichen: univ: p. 157. = Spr: syst: IV. 256. = Hoffm: plant: lich: t. 49. f. 2. (*Eur*: ad rupes et saxa. *Pedem*: ad saxa in alpihus BALB: misc: alt: p. 36. In *M. Musiné* et secus *Sturam* RE fl: tor: II. p. 221.). Crusta cinereo-fuliginosa æqualis rimosa, apothecia depressa planiuscula demum convexiuscula nigra intus concoloria.

\* 4. *L. parasema* = Ach: lichen: univ: p. 175. = Spr: syst: IV. 256. *Lichen parasemus*, *punctatus*, et *limitatus* Auctor: = Hoffm: enum: lichen: t. 5. f. 3. Dill: musc: t. 18. f. 3. (*Eur*: ad corticem arborum. *Pedem*: passim supra cortices arborum BELLARD: app: p. 53. sub *Lichene limitato*. Supra corticem *Mori albæ*



inter *Venariam* et *Altestanum* cum var: *saprophila* et *rugulosa* RE fl: tor: II. p. 222. In cortice arborum in montanis cum var: *punctata* BIROLI fl: acon: III. p. 171. *Sardin:* ad truncos arborum in montanis MORIS st: sard: III. p. 20. *Sabaud:* BILLET in litt: sub *Patellaria parasema* et *punctiformi*). Crusta tenuis albo-cinereascens granulosa nigro-limitata, apothecia planiuscula marginata atra sparsa vel plus minus confluentia. Variat multimode; præcipuas modificationes vide in ACH: l. c.

\* 5. *L. glomerulosa* = Steud: = Sub *Patellaria* DC. fl: fr: n. 937. = Ic: ? (*Gallia* in truncis arborum DC. l. c. Legi cum PERRET in cortice *Cerasi* prope *Aix* in *Sabaud:*). Vix differt a priori, cujus probabilius var:, crusta magis crassa cinerescens *numquam nigro limitata*.

\* 6. *L. atro-alba* = Ach: lichen: univ: p. 162. = Spr: syst: IV. 255. Sub *Lichene* L. alique = *L. verruculosus* engl: bot: t. 2317. sec: Spr: ? (*Eur:* ad rupes et saxa. *Pedem:* habeo ex BELLARD: sine loci indicatione BELLARD: app: p. 54.). Valde accedit ad *L. atrovirentem* n. 1., a qua differt areolis secundariis *convexo-verrucosis albicantibus*.

\* 7. *L. pantosticta* var:  $\gamma$  *spilota* = Ach: lichen: univ: p. 154. = *L. albo-cærulescens* var: Spr: syst: IV. 260. = Ic: ? (*Eur:* ad saxa. *Pedem:* ad saxa prope *Monastero* in valle *Lancei* RE app: II. p. 207.). Crusta areolata rimosa inæquabilis albicans, apothecia crustæ adpressa plana margine proprio tenui elevato thallodem spurium sub-tegente.

\* 8. *L. alba* = Spr: l. c. ex Ach: = *Byssus la-*

*ctea* L. *Lichen lacteus* Schreb: = Sub *Lepra lactea* Wigg: aliique (Ad corticem arborum. *Sabaud*: BILLET in litt: sub *Lepra lactea*). Crusta albida sub-rimosa membranacea, apothecia minuta sparsa plana sub-marginata.

9. *L. petræa* = Ach: lichen: univ: p. 155. Spr: syst: IV. 257. *Lichen petræus* et *concentricus* Auctor: Jacq: coll: III. p. 116. t. 6. f. 2. a (*Eur*: ad saxa et rupes. *Sardin*: iisdem locis MORIS st: sard: III. p. 20. cum var:  $\beta$  *callisnea*). Crusta tenuis orbicularis albâ vel cinerascenti-cæsia in var:  $\beta$ , apothecia crassa crustæ adpressa atra vel irregulariter sparsa in memorata var:

\* 10. *L. gelatinosa* = Spr: syst: IV. 257. ex Flosk: (Ad terram *German*: *Sardin*: in terra ins: S. Pietro MORIS st: sard: IV. p. 20. *Sabaud*: BILLET in litt: sub *Patellaria*). Crusta gelatinosa viridis, apothecia adpressa sub-confluentia irregularia haud marginata atra.

\* 11. *L. confluens* = Ach: lichen: univ: p. 258. = Spr: syst: IV. 258. = Sub *Lichene* Web: spic: fl: Goëtt: p. 180. t. 1. f. 2. Dill: musc: t. 18. f. 8. (*Eur*: ad rupes et saxa. *Pedem*: super saxa in *M. Cenisio* non rara BELLARD: app: p. 54. sub *Lichene*. RE fl: segus: p. 90. Supra saxa in sylvis *della Mandria* alibique RE fl: tor: II. p. 222. sub *Lecidea*. Ad rupes schistosas præcipue BIROLI fl: acon: II. p. 171.). Crusta sub-effusa rimoso-areolata plus minus fusco-cinerascens albida vel ochracea, apothecia sæpe magna irregularia convexa confluentia atra intus concoloria. Variat multimode præsertim colore crustæ et apothecii magnitudine.

\* 12. *L. lapicida* = Ach: lichen: univ: p. 159. = Spr: syst: IV. 258. = Sub *Lichene* Hoffm: plant: lich: t. 62. f. 1. 4. (*Eur:* ad saxa et rupes quas ad superficiem destruit. *Pedem:* ad saxa in valle *Augustana* BALB: misc: bot: p. 46. Abunde ad saxa in sterilibus *di Campagnola* prope *Alpinianum* RE fl: tor: II. p. 221. *Sardin:* ad saxa rupesque MORIS st: sard: III. p. 20.). Crusta tartarea rimosa colore vario plerumque ex albido-cinerascente, apothecia sub-immersa demum convexa sub-confluentia atra intus cornea cinerascenti-nigra. Variat tum crustæ colore, cum apotheciis plus minus immersis plus minus confluentibus. An huc referenda *L. cinereo-atra* BALB: el: p. 6.? Videtur ex STEUD: Nulla habeo specim: sub hoc nomine.

\* 13. *L. fusco-atra* = Ach: meth: lich: p. 44. = Spr: syst: IV. 259. Sub *Lecanora* Ach: lichen: univ: p. 359. Sub *Lichene* L. aliique = Hoffm: plant: lich: t. 19. f. 4. (*Ad rupes Eur:* *Pedem:* in *M. Cenisio* BELLARD: app: p. 54. sub *Lichene*. In cortice arborum et saxis RE fl: tor: II. p. 233. sub *Lecanora*). Crusta tenuis atra areolis nigro-fuscis planis lævigatis tecta, apothecia depressa disco plano atro margine thallode elevato tenui.

\* 14. *L. sanguinaria* = Ach: lichen: univ: p. 170. tab: II. f. 4. = Spr: syst: IV. 259. Sub *Lichene* L. aliique. = Engl: bot: t. 153. (*Eur:* ad ligna rupes et saxa. *Pedem:* supra muscos et ligna putrida BELLARD: app: p. 54. RE fl: segus: p. 90. ambo sub *Lichene*). Crusta rugoso-verrucosa ex albido glaucescens vel sub-virescens rugis vetustate gyrosis erectiusculis, apothecia hemisphærica sub-tuberculosa atra intus



sanguinea. Huc videtur spectare *Sphaeria nitida* BALB: el: p. 7. sec: STEUD:

\* 15. *L. argillacea* = Ach: lichen: univ: p. 184. = Spr: syst: IV. 259. Sub *Lichene* Bellard: app: p. 53. = Ic: ? (*Pedem*: locis argillosis prope *Grosso* BELLARD: l. c.). Crusta tenuissima sordide lutea, apothecia sub-aggregata nigra intus ex rubro fulva.

\* 16. *L. Dicksonii* var: *Oederi* = Ach: lichen: univ: p. 165. = *L. albo-cærulescens* var: Spr: syst: IV. 260. *Lichen Oederi* Sw: aliique = Fl: dan: t. 470. f. 1. ? (*Eur*: ad rupes et saxa. *Pedem*: in sylvis *della Mandria* RE fl: tor: II. p. 222. sub *L. Oederi*). Crusta effusa rimoso-areolata rugosiuscula sub-pulverulenta ochraceo-rubra, apothecia minuta sessilia disco punctiformi impresso demum convexiusculo atra intus pulveracea sub-concoloria. Planta dubia, hinc *L. silaceæ* illinc *L. albo-cærulescenti* affinis, ad primam tamen potius accedens.

\* 17. *L. speirea* = Ach: syn: 31. = Spr: l. c. = Ic: ? (Ad rupes et saxa *Sabaud*: BILLET in litt: sub *Patellaria cretacea*). Crusta nivea tartarea, apothecia albo-pruinosa margine thallode cincta strato sub disco cinerascete. Ad hanc speciem pertinet *P. cretacea* sec: DUBY bot: gall: p. 652.

\* 18. *L. flavicunda* = Ach: lichen: univ: p. 166. = *L. albo-cærulescens* var: Spr: syst: IV. 260. = Ic: ? (In saxis montium *Helvetiæ*. *Pedem*: in saxis sylvarum *della Mandria* RE app: II. p. 207. et fl: tor: II. p. 222.). Vix differt a priori crusta *flavicante*, rugis *tenuioribus*, apotheciis *immersis* sub-pruinosis intus *nigris*, strato sub disco *corneo-hyalino*.

19. *L. erythrocarpia* = Ach: lichen: univ: p. 205. (*Gallia. Sardin:* ad rupes calcareas *Cagliari* vulgarissima MORIS st: sard: III. p. 20.). Crusta tartarea determinata sub-orbicularis pulverulenta alba, apothecia minuta conferta adpressa plano - concaviuscula rufa margine thallode basi sub-ocellata. Stirps speciosissima omissa a SPR:

\* 20. *L. aurantiaca* = Ach: lichen: univ: p. 204. = Sub *Lichene* Ach: lichen: suec: p. 44. excell: synn: = Ic: ? (*Succia* ad truncos *Populi tremulæ*, *Fagi. Pedem:* BALB: el: p. 6. Supra lapides in collibus *August. Prætor:* nec non in *Sabaud:* rupibus BELLARD: app: p. 60. Supra corticem *Populi albæ* et *tremulæ* minime rara RE fl: tor: II. p. 224. BIROLI fl: acon: II. p. 173.). Crusta determinata lævigata albicanti-cinerascens vel flavescens, apothecia conferta plana demum convexo - hemisphærica aurantiaca. Omissa a SPR:

B *Lepidomata* (Ach: l. c. p. 111.).

\* 21. *L. vesicularis* = Ach: lichen: univ: p. 212. = SPR: syst: IV. 261. *Lichen vesicularis, sedifolius, leucophæus, graniformis* quorund: = Fl: dan: t. 955. f. 2. (*Eur:* passim ad terram. *Pedem:* BALB: el: p. 6. Ad terram in locis montosis RE fl: tor: II. p. 224. *Sabaud:* BILLET in litt: sub *Psora*. *Sardin:* iisdem locis MORIS st: sard: III. p. 20.). Crusta nigro-fusca e lobis varie complicatis polymorpha verrucoso-pruinosa, apothecia atra nuda confluentia plana demum convexo-hemisphærica sub-immarginata.

\* 22. *L. lurida* = Ach: lichen: univ: p. 213. =

Spr: syst: IV. 261. *Lichen luridus* et *squamatus* quorund: = Engl: bot: t. 1329. (Eur: passim ad rupes supra terram. Pedem: BALB: el: p. 5. In sylvis della Mandria RE fl: tor: II. p. 225. Ad radices arborum inter muscos BIROLI fl: acon: II. p. 173. Sabaud: BILLET in litt: sub *Psora*). Crusta imbricata lurida lobis orbiculatis crenatis flexuosis subtus pallidioribus, apothecia plana fusca demum nigra marginem amittentia. Huc videtur referendus *Lichen squamosus* VILL: inter saxorum rimas locis montanis et alpinis lectus a cl: BELLARD: app: p. 61.

\* 23. *L. decipiens* = Ach: meth: p. 80. = Spr: syst: IV. 261. Sub *Lecanora* Ach: lichen: univ: p. 409. = Sub *Lichene* Hedw: st: cr: II. p. 7. t. 1. f. B. *Lichen peltiphyllus* Bellard: (Eur: ad terram in montibus calcareis. Pedem: in aridis secus *Sturam*, tum etiam *alla Ficca della Dora* RE fl: tor: II. p. 236. sub *Lecanora*. In *M. Cenisio* et in alpinis *d'Ussey*, vallis *Pisii* et maritimis BELLARD: app: p. 61. sub *Lichene peltiphyllus*. Copiose inter *Foresto* et *Bossoleno* locis sterilibus RE fl: segus: p. 90. sub eod: Sabaud: BILLET in litt: sub *Psora*. Sardin: terra calcarea *Cagliari* frequens MORIS st: sard: III. p. 20.). Crusta imbricata lobis adpressis sub-rotundis fuscis subtus albidis, apothecia marginalia convexa atra.

\*? 24. *L. canescens* = Ach: lichen: univ: p. 216. = Spr: syst: IV. 261. = Sub *Lichene* Dicks: pl: crypt: brit: I. p. 10. t. 2. f. 5. (In muris et truncis arborum *Angliæ*, *Galliæ*. Pedem: ad montem *Rosa* BIROLI fl: acon: II. p. 471. Sabaud: BILLET in litt: sub *Plavol*. VI. 28



*codio*). Crusta orbicularis rugoso-plicata nuda demum pulverulenta candida, apothecia minuta sparsa plano-convexa atra margine tenui vel evanescente. Specim: ex monte *Rosa* non habeo. An planta *BIROLI* ad *Pattellariam incanam* SPR: referenda? Videtur ex synon:

\* 25. *L. candida* = Ach: lichen: univ: p. 212. = Spr: syst: IV. 262. *Lichen candidus* et *tumidulus* quorund: = Hoffm: plant: lich: t. 33. f. 2. (*Eur*: passim in rupibus ad terram. *Pedem*: in valle *Segusiana*, *M. Cenisio* et alpinis *Ussey* inter saxorum fissuras *BELLARD*: app: p. 62. *RE fl*: segus: p. 90. Habeo etiam ex valle *Pisii* a *CUMINO*. *Sabaud*: *BILLET* in litt: sub *Psora*). Crusta candido-pruinosa e lobis crenato-incisis tumidis complicatis composita, apothecia adpressa nigra cærulescenti-pruinosa demum confluentia difformia margine undulato:

*C. Gyrophora* (Ach: l. c. p. 218.).

\* 26. *L. pustulata* = Ach: meth: p. 85. = Spr: syst: IV. 262. Sub *Gyrophora* Ach: lichen: univ: p. 226. Sub *Lichene* L. sp: 1617. alique = Dill: musc: t. 30. f. 131. Engl: bot: t. 1283. (Ad rupes et saxa *Eur*:, *Amer*: bor: *Pedem*: in rupibus et locis apricis montanis *ALL*: n. 2571. *RE fl*: segus: p. 88. ambo sub *Lichene*. Agro *Taurin*: in valle *Patonera* *RE fl*: tor: II. p. 225. sub *Gyrophora*. Ad rupes umbrosas montium frequenter occurrit *BIROLI fl*: acon: II. p. 471. sub *Lecidea*. *Sardin*: ad rupes frequentissima *MORIS st*: sard: III. p. 19. sub *Gyrophora*). Thallus papulosus cinereo-virescens plerumque oblongus subtus

lacunosus lævis fuscescens, apothecia plana sub-marginata disco sub-æquabili vel papilloso.

\* 27. *L. proboscidea* = Nob: = Sub *Gyrophora* Ach: lichen: univ: p. 220. tab: II. f. 8. *Lichen proboscideus* L., *mesenteriformis* Wulf: , *deustus* et *Dillenii* quorund: = Dill: musc: t. 20. f. 41. *Lecidea polymorpha* var:  $\gamma$  Spr: syst: IV. 263. (*Eur*: montibus. *Pedem*: in sylvis abienis minime rara ALL: n. 2572. sub *Lichene*. Ad rupes Alpium BIROLI fl: acon: II. p. 176. sub *Gyrophora*. *Sabaud*: BILLET in litt: sub *Umbilicaria*). Thallus tenuis membranaceus orbicularis reticulato-rugosus cinereo-fuliginosus subtus lævis pulvisculo glauco interdum adpersus, apothecia turbinata simpliciuscula demum convexiuscula gyrosoplicata.

\* 28. *L. cylindrica* = Nob: = Sub *Gyrophora* Ach: lichen: univ: p. 223. *Lichen cylindricus* L., *crinitus* Lightf., *proboscideus* Huds: non L., *polyrrhizus* Web: = Fl: dan: t. 471. f. 1. 2. Dill: musc: t. 29. f. 116. *Lecidea polymorpha* var:  $\beta$  Spr: syst: IV. 263. (In montibus *Eur*: fere totius. *Pedem*: in valle *Augustana* BALB: misc: p. 48. sub *Lichene*. Super alpinas rupes BIROLI fl: acon: II. p. 176. sub *Gyrophora*. *Sardin*: ad saxa in montibus MORIS st: sard: III. p. 19. sub ead:). Thallus plicatus glauco-cinereus fibrillis atris ciliatus subtus lævis sub-nudus ochroleucus, apothecia elevata sub-cylindrica demum hemisphærica gyroso-plicata.

\* 29. *L. hyperborea* = Nob: = Sub *Gyrophora* Ach: lichen: univ: p. 225. *Lichen hyperboreus*, *Jacquini*, *pullus* quorund: = Hoffm: plant: lich: t. 71.

sub *Umbilicaria*. *Lecidea polymorpha* var:  $\epsilon$  Spr: syst: IV. 263. (In montibus Sueciæ, German: , Angliæ. *Pedem*: ad rupes montium frequens BIROLI fl: acon: II. p. 176. sub *Gyrophora*). Thallus papuloso-rugosus fusco - nigricans subtus obsolete lacunosus lævis ater, apothecia anguloso-diformia planiuscula nitida.

\* 30. *L. deusta* = Spr: syst: IV. 263. = Sub *Gyrophora* Ach: lichen: univ: p. 225. *Lichen deustus* L., *flocculosus* Wulf: in Jacq: coll: III. p. 99. t. 1. f. 2. = Dill: musc: t. 30. f. 117. (*Eur*: alpinus. *Pedem*: in rupibus locis apricis ALL: n. 2573. sub *Lichene*. Ad rupes montium frequens BIROLI fl: acon: II. p. 175. sub *Gyrophora*). Thallus scabriusculus olivaceo-fuscus pulverulentus subtus impresso-punctatus lacunosus lævis nudus concolor, apothecia plana circinato-plicata demum convexa gyroso-rugosa.

\* 31. *L. vellea* = Spr: syst: IV. 264. = Sub *Gyrophora* Ach: lichen: univ: p. 228. tab: II. f. 9. Sub *Lichene* L. aliique = Dill: musc: t. 82. f. 5. (*Eur*: , *Amer*: bor: *Pedem*: in montibus supra *Giaveno* ALL: auct: n. 2570.\* RE fl: segus: p. 90. ambo sub *Lichene*. In alpibus *Sessitis* frequens BIROLI fl: acon: II. 177. *Sardin*: ad rupes montis *Perdosa* in *Oliastra* MORIS st: sard: III. p. 19.). Thallus omnium amplissimus sub-coriaceus læviusculus cinereo - fuscus subtus hirsutus nigrescens, apothecia plana marginata disco papillula centrali elevata, plica una alterave circulari ornata.

\* 32. *L. spadochova* = Nob: = Sub *Gyrophora* Ach: lichen: univ: p. 229. *Lichen spadochovus*, *vel-leus*, *polyrrhizus*, *glaucus* quorund: *Lecidea hirsuta*



var: Spr: syst: IV. 263. = Hoffm: plant: lich: t. 2. f. 3. 4. (*Suecia, German:, Helvet: Pedem: ad rupes alpium non rara BIROLI fl: acon: II. p. 176.*). Priori valde affinis, a qua differt præsertim thallo *rigidiori supra elevato-punctato subtus scabro sub-fibrilloso*, apotheciis nec *plicatis* nec *gyrosis*.

\* 33. *L. hirsuta* = Spr: syst: IV. 263. excl: syn: præcedentis. = Sub *Gyrophora* Ach: in nov: act: Stockh: vol. XV. t. 3. f. 1. et lichen: univ: p. 230. (Cum priori BIROLI fl: acon: II. p. 176.). Duabus præcedentibus similis, sed substantia *molliori flexibili*, thalli ambitu fere semper *revoluto*, et apotheciis *rarissimis hemisphæricis gyrosissimis* satis diversa. Huc videtur spectare *Lichen velleiformis* BELLARD: app: p. 68. (*Gyrophora* Ach: lichen: univ: p. 231.) repertus supra saxa in montibus *Limoni*.

\* 34. *L. pellita* = Spr: syst: IV. 264. = Sub *Gyrophora* Ach: lichen: univ: p. 218. tab: II. f. 10. *Lichen pellitus, polyrrhizus, scalopodoron* quorund: = Dill: musc: t. 30. f. 130.? (*Eur: passim. Pedem: ad saxa supra la Ferriere ALL: n. 1574. RE fl: segus: p. 88. ambo sub Lichene polyrrhizo?*). Thallus lævigatus sinuato-lobatus fusco-æneus subtus atro-fibrillosus hirsutus, apothecia fere uti in priori. Planta pro synonymia valde obscura; forsán *L. velleæ* vel *hirsutæ* mera var:

\* 35. *L. polyphylla* = Spr: syst: IV. 263. = *Gyrophora heteroidea* var:  $\beta$  Ach: lichen: univ: p. 219. *Lichen polyphyllus* L. aliorumq: = Hoffm: plant: lich: t. 59. f. 2. Engl: bot: t. 1272. (*Eur: ad rupes et saxa passim. Habeo ex BELLARD: lectam supra saxa M. Ce-*

*nisii*). Stirps polymorpha, a præcedentibus tamen etiam in ejus quamplurimis modificationibus distinguenda superficie paginæ inferioris thalli *lævi nuda et atra*.

\* 36. *L. tabacina* = Steud: nom: p. 239. = Sub *Psora* Duby bott: gall: p. 657. ex DC. (In rupibus *Pyrenæorum* RAMOND: *Sabaud*: BILLET in litt: sub *Psora*). Crusta crassa grumosa sub-imbricata fulvo-rufa squamosa squamis confertis complicatis bullatis sub-nitidis, apothecia atra numerosa conferta planiuscula margine tenui dein convexa tandem globosa confluentia immarginata.

III. PATELLARIA Spr: syst: n. 3375. ex Hoffm: non Fries = *Patellaricæ*, *Lecideæ*, *Trachylicæ*, *Biatoræ*, *Lecanoræ*, *Bysii*, *Leprariæ*, *Myriotremæ*, *Collemæ*, *Bæomycidis* spec: nonnullæ quorund:

» *Apothecia* patellæformia vel hemisphærica. *Lamina* proligera sub-cornea colorata libera, margine » vel nullo vel thallode demum concolore. »

*Obs*: Genus haud satis bene determinatum, constans ex SPR: 56. stirpibus, quarum multæ pro genere valde dubiæ.

\* 1. *P. immersa* = DC. fl: fr: n. 930. = Spr: syst: IV. 264. Sub *Lecidea* Ach: lichen: univ: p. 153. Sub *Lichene* Web: aliique = Engl: bot: t. 193. (*Eur*: passim ad saxa et rupes. *Pedem*: supra saxa prope *Supergam*, in rupibus alpium *di Ussey* BELLARD: app: p. 57. Passim prope *Segus*: in sterilibus *della Brunetta* et *di S. Lazzaro* RE fl: *segus*: p. 90. ambo sub *Lichene*. Supra tellurem prope *il Parco della Veneria* RE fl: tor: II. p. 221. sub *Lecidea*. *Sabaud*: BILLET

in litt:). Crusta sub - continua tartarea albida, apothecia crassiuscula sessilia plano-concava crustæ immersa marginata atra intus albicantia. Variat crusta sub-nulla, apotheciis elevatis convexiusculis.

\* 2. *P. sabuletorum* = Spr: syst: IV. 264. = *Lecidea muscorum* Ach: lichen: univ: p. 179. ? *Lichen muscorum* Wulf: ? = Fl: dan: t. 1003. f. 1. ? (*Eur: passim. Pedem: habeo ex BELLARD: lectam in viridario Regio supra corticem arborum sub nomine Lichenis mucosiformis* Scop:). Differt a priori crusta verrucosa cinerascens, apotheciis convexis confluentibus; stirps ceterum pro synonymia valde dubia. Specim: mea magis quadrant cum var:  $\beta$  *geochroa* Ach: l. c. *Lichen muscorum* WEB: pertinet ad *Patellariam fuscoluteam* Hoffm: quam non possideo. *Patellaria muscorum* SPR: vid: infra n. 15.

\* 3. *P. luteola* = Nob: = *P. vernalis* Spr: syst: IV. 265. excl: syn: L. *Lecidea luteola* Ach: lichen: univ: p. 195. *Lichen luteolus* Schrad: = *Lichen vernalis* Hoffm: en: lich: t. 5. f. 1. non L. (*Eur: in cortice arborum. Pedem: supra ramos nucis Juglandis prope Venariam* Re fl: tor: II. p. 224. et BALB: el: p. 6. sub *Lecidea luteola*). Crusta tenuissime granulata cinereo-virescens, apothecia sessilia convexiuscula fuscescenti-luteola margine integro demum sub-evanescente. Male confusam fuisse a SPR: stirpem hanc cum *Lichene vernali* L. (*Lecidea vernalis* Ach: l. c. p. 198.) probat hujusce Auctoris descriptio.

\* 4. *P. incana* = Spr: syst: IV. 265. = Sub *Lepitaria* Ach: lichen: univ: p. 665. Sub *Byssu* L. = Sub *Lichene* Hoffm: en: lich: p. 7. t. 1. f. 6. aliique (*Eur:*



ad terram et arbores. *Pedem*: prope *Monasterium* in valle *Lancei* RE app: II. p. 215. pro var:  $\beta$  *latebrarum*). Crusta glauco-viridis incana leproso-farinosa, apothecia (an vera?) globulosa brunnea margine pallidiora.

\* 5. *P. viridescens* = DC. fl: fr: n. 945. = Spr: syst: IV. 265. Sub *Lecidea* Ach: lichen: univ: p. 200. Sub *Lichene* Schrad: = Engl: bot: t. 2217. (*Eur*: ad truncos emortuos. *Pedem*: ad radices arborum et truncos putrescentes BIROLI fl: acon: II. p. 173. sub *Lecidea*). Crusta tenuis granulata æruginoso-viridis, apothecia convexa rugosa irregularia confluentia nigro-fusca.

\* 6. *P. anomala* = Spr: syst: IV. 265. = Sub *Parmelia* Ach: meth: p. 39. Sub *Lecanora* Ach: lichen: univ: p. 381. = Ic: ? (*Eur*: ad corticem arborum et saxa. *Pedem*: supra *Quercus* corticem in sylvis della *Mandria* et supra corticem *Fraxini excelsioris* prope la *Praglia di Pianezza* RE app: II. p. 211. et fl: tor: II. p. 234. sub *Lecanora*). Crusta effusa late dispersa albo-cinerea rimoso-areolata areolis irregularibus glabris, apothecia parva frequentia concaviuscula demum convexa pallide fuscescentia vel nigrescentia margine thallode elevato crassiusculo integro.

\* 7. *P. æruginosa* = Spr: syst: IV. 266. = Sub *Lichene* Scop: fl: carn: II. n. 1368. pro var:  $\beta$  = Hagen: hist: lich: p. 52. t. 1. f. 4. *Lecidea icmado-phila* Ach: lichen: univ: p. 191. Sub *Lichene* L. *Lichen elveloides* Web: Fl: dan: t. 472. f. 4. pro var:  $\alpha$  (*Eur*: ad terram et ad arbores. *Pedem*: ad corticem arborum emortuarum locis montanis et sub-alpinis

ALL: n. 2540. sub *Lichene elveloide*. Supra tellurem in alpib: *Monregalensibus* RE app: I. p. 44. Super terram locis uliginosis et super ligna putrescentia frequens BIROLI fl: acon: II. p. 172. ambo sub *Lecidea icmadophila* cum varr: *Sardin*: ad corticem arborum in montibus MORIS st: sard: III. p. 20. sub ead: *Sabaud*: BILLET in litt: sub *Bæomycide*). Crusta e granulis minutis conglomerata plus minus albo-virescens vel cinereo-glauescens, apothecia sub-sessilia plana demum convexiuscula carnea vel sub-lutescentia margine tenui flexuoso.

\* 8. *P. ventosa* = DC. fl: fr: n. 960. = Spr: syst: IV. 266. Sub *Lecanora* Ach: lichen: univ: p. 399. Sub *Lichene* L. aliiq: = Fl: dan: t. 712. f. 2. *Lichen cruentus* Web: spicil: fl. goëtt: t. 1. var:  $\alpha$ . Dill: musc: t. 18. f. 4. pro var:  $\beta$  *lepadolemma* (*Eur*: ad rupes et saxa. *Pedem*: iisdem locis ALL: n. 2573. In rupibus *di Montanvert* prope *M. album* BALB: addit: p. 100. ambo sub *Lichene cruento*. *Sardin*: ad rupes editas *Genargentu*, *Trebina* MORIS st: sard: III. p. 20. sub *Lecanora ventosa*. *Sabaud*: BILLET in litt:). Crusta rimoso - areolata cinereo - flavescens areolis convexis plicato-verrucosis, apothecia adpressa demum irregularia disco plano rufo - fusco margine thallode tenui integro. Var:  $\alpha$  *cruenta* gaudet crusta *viridi-flavescente*, apotheciorum disco *ruberrimo*.

\* 9. *P. ferruginea* = Hoffm: pl: lich: VI. p. 40. t. 12. f. 1. et t. 35. f. 1. = Spr: syst: IV. 266. = *Lecidea cinereo-fusca* Ach: lichen: univ: p. 202. *Lichen cinereo-fuscus* Web: (*Eur*: passim. *Pedem*: cortices arborum inhabitat in sylvis ALL: n. 2539. sub

*Lichene cinereo-fusco*. Supra corticem *Quercus Roburis* in sylvis della Mandria RE app: II. p. 208. et fl: tor: II. p. 224. sub *Lecidea cinereo-fusca*. Sardin: ad truncos arborum MORIS st: sard: III. p. 20. sub ead: ). Crusta tenuis sub-rimosa inæquabilis albo-cinerea, apothecia planiuscula e rubro ferrugineo-fuscescentia demum anguloso-diformia margine tenui persistente.

\* 10. *P. fusco-lutea* = Hoffm: lich: III. t. 65. f. 1. = Spr: l. c. = *P. muscorum* DC. (Supra muscos semidestructos Sabaud: BILLET in litt: sub *P. muscorum*). Crusta tenuis effusa membranacea albido-cinerea nitidula granulosa, apothecia superficialia plana rubro-lutea demum rufo-fusca marginata.

\* 11. *P. rupestris* = DC. fl: fr: n. 979. = Spr: syst: IV. 266. Sub *Lecidea* Ach: lichen: univ: p. 206. Sub *Lichene* Scop: aliique = Fl: dan: t. 825. f. 2. (Eur: ad rupes et saxa. Pedem: super rupes subalpinas abundat BIROLI fl: acon: II. p. 173. sub *Lecidea*. Sardin: ad rupes frequens MORIS st: sard: III. p. 20. sub ead:). Crusta tartarea tenuis albo-cinerascens vel virescens sub-rimosa, apothecia immersa plana demum convexa rubra intus concoloria margine non raro evanescente.

\* 12. *P. effusa* = DC. fl: fr: n. 966. = Spr: syst: IV. 267. Sub *Lecanora* Ach: lichen: univ: p. 386. *Lichen effusus* Pers:, *salignus* Schrad: = Ic: ? (In salicibus cavis German:, Gallicæ. Pedem: supra arbusculorum corticem in rupe dicta delle tre pene prope Segus: RE app: I. p. 42.). Crusta tenuis sub-pulverulenta cinereo-fusca æruginosa, apothecia minutissima sæpius conferta plana demum convexa pallide fusca



marginē thallode tenuissimo crenulato pulverulento sub-ëvanescente.

\* 13. *P. rosella* = DC. fl: fr: n. 963. = Spr: syst: IV. 267. *Lichen rosellus* Pers: aliique. *Lecidea alabastrina* var:  $\beta$  Ach: lichen: univ: p. 190. = *Lichen albo-incarnatus* Wulf: in Jacq: coll: III. t. 2. f. 3. sec: DC. l. c. (*Eur:* ad corticem arborum. *Pedem:* supra corticem *Ulmi campestris* prope *Venariam* RE app: II. p. 208. et fl: tor: II. p. 224. sub *Lecidea alabastrina*. *Sardin:* inter muscos in terra MORIS st: sard: III. p. 20. sub ead:). Crusta tenuis granulosa cinerascens, apothecia plano-convexiuscula rosea margine dilutiori.

\* 14. *P. polytropa* = Hoffm: pl: lich: t. 58. f. 2. = Spr: syst: IV. 268. *Lichen polytropus* et *atrovirens* quorund: = *Lecidea Ehrhartiana* var:  $\beta$  Ach: lichen: univ: p. 192. (*Eur:* ad lapides et ligna. *Pedem:* ad saxa in *M. Cenisio* BALB: misc: alt: p. 36.). Crusta rimoso-areolata sordide flavo-virescens quandoque subnulla, apothecia juniora plana marginata dein convexa sub-globosa conglomerata ob mutuam pressionem angulosa flavescencia margine evanida. Huc spectat *Lichen flavus* BELLARD: app: p. 55. quem primum cl: ACH: in meth: lich: p. 181. duxerat ad *Parmeliam unicolorem*, demum ad *Lichen polytropum* spectare observavit in lichen: univ: l. c. Specim: ex BELLARD: sub *Lichene flavo* et a BIROLI sub *Parmelia unicolori* (fl: acon: II. p. 182.) perfecte quadrant cum descr: Achardiana.

\* 15. *P. muscorum* = Spr: syst: IV. 268. = *Lecanora hypnorum* Ach: lichen: univ: p. 417. = *Lichen*

*carnosus* Engl: bot: t. 1684. ? Fl: dan: t. 956. (*Eur:* ad muscos destructos. *Pedem:* supra muscos in *M. Cenisio* BELLARD: app: p. 55. RE fl: segus: p. 90. Ad terram et supra muros RE app: II. p. 208. et fl: tor: II. p. 223. sub *Lecidea muscorum*. In terra crescit in collibus BIROLI fl: acon: II. p. 171. sub ead:). Crusta imbricata viridi-fusca lobis irregulariter laciniatis marginibus eroso - sub - granulatis, apothecia planiuscula badio - rubra margine evanescente. Stirps pro synonymo: valde dubia et forsitan a Botanicis nostris confusa cum *P. sabuletorum* n. 12.

\* 16. *P. nigra* = Spr: syst: IV. 268. = Sub *Collema* Ach: lichen: univ: p. 628. Sub *Lichene* Huds: aliique = Hoffm: enum: lich: t. 3. f. 6. *Byssus antiquitatis* L. sp: 1638. Dill: musc: t. 1. f. 18. (*Eur:* ad rupes et muros. *Pedem:* supra lapides secus *Sturam* alibique RE app: II. p. 213. et fl: tor: II. p. 253. sub *Collema*. Innascitur frequens lapidibus septentrioni expositis ALL: auct: n. 2660.\* RE fl: segus: p. 91. In muris antiquis locis humidis BIROLI fl: acon: II. p. 207. omnes sub *Byssus antiquitatis*. *Sabaud:* BILLET in litt: sub *Collema nigro*). Crusta sub-gelatinosa sub-orbicularis fusco-nigra lobulata lobulis in ambitu inciso-crenatis centralibus sub-ramulosis, apothecia adpressa nigra marginata demum convexa; emollita tota gelatinosa, unde ad *Collema* amandata a cl: Ach: *Lepraria antiquitatis* BIROLI fl: acon: II. p. 169. videtur eadem planta.

\* 17. *P. rufa* = Spr: syst: IV. 269. = *Baeomyces rupestris* Ach: lichen: univ: p. 573. tab: XII. f. 1. = *Lichen fungiformis*, *peltifer*, *byssoides*, *rufus* et *sabu-*

*letorum* quorund: Dill: musc: t. 14. f. 5. (*Eur:* ad terram et in lignis semi-putridis. *Pedem:* in sterilibus apricis collium *Taurin:* ALL: auct: p. 50. n. 2536.\* sub *Lichene byssoideo*. In *Sabaud:* BELLARD: app: p. 56. sub *Lichene fungiformi*. BILLET in litt: sub *Bæomycide rupestri*. In pascuis super terram, speciatim secus vallem *Ticini* vulgaris var: *rufa* BIROLI fl: acon: II. p. 201. sub *Bæomycide rupestri*. *Alle Garzegne* prope urbem *Montisregalis* supra corticem *Castaneæ* RE app: II. p. 213. sub ead:). Crusta uniformis rugoso-granulata pulverulenta albo-cinereo-virescens, apothecia convexiuscula sub-simplicia rufo-fusca podetiis brevibus sub-compressis sustenta. Variat forma magnitudine et colore apotheciorum et podetiorum uti ex ACH: l. c.

\* 18. *P. ericetorum* = Spr: syst: IV. 269. = *Bæomyces roseus* Ach: lichen: univ: p. 572. tab: XII. f. 2. *Lichen ericetorum* et *Bæomyces* quorund: = Dill: musc: t. 14. f. 1. (*Eur:* ad terram argillosam. *Pedem:* frequens locis udis et sterilibus prope *S. Pancrazio* et loco dicto *la Caccia* ALL: n. 2543. Terra innascitur in locis apricis RE fl: segus: p. 87. ambo sub *Lichene ericetorum*. Abunde supra tellurem in sterilibus *della Mandria* alibique RE fl: tor: II. p. 250. In ericetis *Ticini* vulgaris BIROLI fl: acon: II. p. 201. ambo sub *Bæomycide roseo*. *Sabaud:* BILLET in litt: sub *Bæomycide*). A priori distinguitur crusta verrucosa albo-incana, apotheciis sub-globosis roseis, podetiis brevissimis cylindricis.

\* 19. *P. candelaris* = DC. fl: fr: n. 974. = *Leptra flava* Ach: lich: p. 663. = *Lichen flavus* Engl:



bot: t. 1350. (In parietibus *Sabaud*: BILLET in litt: sub *L. flava*). Planta mihi dubia, crusta effusa æquabilis tenuis sub-rimosa flavissima e granulis sub-globosis nudiusculis composita. Quid in SPR:?

IV. CLADONIA Hoffm: fl: germ: = Spr: syst: n. 3376. = *Cenomycidis* et *Bæomycidis* spec: Ach: = *Capitulariæ*, *Helopodii*, *Scyphophori*, *Pocilli* spec: paucae quorund:

» *Apothecia* capituliformia podetiis fistulosis solive sustenta. *Lamina* prolifera sub-carnosa mox inflata limbo inflexo: »

*Obs*: Genus satis distinctum praesertim apotheciis constanter *capitatis pedicellatis* seu podetio instructis, ad quod cl: SPR: omnes *Cenomycides* et majorem *Bæomycidum* stirpes amandavit, nonnullis ex hisce inter *Patellarias pedunculatas* relatis. Constat autem 40. circiter stirpibus fere omnibus europæis ad terram rarius ad arborum cortices vigentibus. Differentia inter *Cenomycidem* et *Bæomycidem* quum præcipue in podetiorum substantia, *fistulosa* in prima, *solida* in altera consistat, haud sufficiens videtur ad distincta genera constituenda; sectiones tamen ex thalli substantia podetiorumque forma facilius ducunt ad stirpium determinationem.

A *Thallo* sub-crustaceo aut nullo, podetiis simplicibus vel ramosis apice haud dilatatis.

\* 1. Cl: *Papillaria* = Spr: syst: IV. 270. ex Hoffm: = Sub *Cenomycide* Ach: lichen: univ: p. 571.

*Lichen Papillaria* et *madreporoides* quorund: = Dill: musc: t. 16. f. 28. (*Eur:* passim ad terram limosam. *Pedem:* supra tellurem in sylvis *della Mandria* RE app: II. p. 213. et fl: tor: II. p. 250. sub *Cenomycide*. Habeo ex *Chambery* ab HUGUEN:). Crusta uniformis granulata cinerea, podetia breviter papillæformia inania sub-simplicia glabra alba, apothecia minuta rufo-fusca.

\* 2. *Cl: subuliformis* = Spr: syst: IV. 270. ex Hoffm: = *Cenomyces vermicularis* Ach: lichen: univ: p. 31. *Lichen subuliformis* et *vermicularis* quorund: = *L. subulatus* Vill: delph: III. t. 55. *L. tauricus* Wulf: in Jacq: coll: II. t. 12. f. 2. (*Eur:* ad terram in alpihus. *Pedem:* in *M. Cenisio* RE fl: segus: p. 90. BELLARD: app: p. 69. ambo sub *L. tubulato*. In pascuis summarum alpium inter muscos et supra ligna putrescentia BIROLI fl: acon: II. p. 205. sub *Bæomycide vermiculari*. Frequens in *M. Cenisio* RE fl: segus: p. 90. sub *L. vermiformi*? *Sabaud:* BILLET in litt: sub *Cl: vermiculari*. Habeo etiam ab HUGUEN: sub *Cenomycide vermiculari*). Thallus sub-nullus, podetia elongata subulata fistulosa vel sub-ventricosa glabra integerrima vel apice sub-divisa erecta vel prostrata albidissima vel rubescentia acumine concolori sterili. *Lichen vermiformis* RE non videtur differre a *L. subulato* ejusdem Auctoris.

\* 3. *Cl: uncialis* = Hoffm: fl: germ: p. 117. = Spr: syst: IV. 270. Sub *Cenomycide* Ach: lichen: univ: p. 558. Sub *Lichene* L. sp: 1621. aliique = Dill: musc: t. 16. f. 22. (Ad terram *Eur:* et *Amer:* bor: *Pedem:* locis montanis et collinis sylvaticis frequens ALL: n. 2585. RE fl: segus: p. 89. ambo sub *Lichene*.

BIROLI fl: acon: II. p. 204. sub *Baeomycide*). Differt a priori statura generatim *majori*, podetiis *albo-virentibus* plus minus ramosis, ramis *patulis* apice *radiato-denticulatis* sub - perforatis, denticulis *fuscis*; ceterum valde polymorpha. Habeo ex *Chambery* typum et ex *M. de Grenier* var: *pseudo-oxyceras* ab HUGUEN:; in hac podetia longiora albidiora, rami stricti. Huc videtur referendus *Lichen ceranoides* ALL: non LAM: (DILL: musc: t. 16. f. 21.) ex syn: STEUD:, omissus ab ACH: et SPR:, quem habeo etiam ex *Sabaud:* a BILLET sub *Cl: ceranoidea* et *subulata*. *L. ceranoides* LAM: pertinet ad *Peltigeram* SPR: (*Parmelia hottentotta* ACH:) *Afr: austr: incolam.*

\* 4. *Cl: furcata* = Hoff: fl: germ: p. 115. = Spr: syst: IV. 270. excl: syn: L. = Sub *Cenomycide* Ach: lich: univ: p. 560. t. XI. f. 6. Sub *Lichene* Huds: aliique (*Eur: passim ad terram. Pedem: in collibus Taurin: BALB: misc: alt: p. 37. sub Lichene. In sylvis della Mandria RE fl: tor: II. p. 248. sub Cenomycide. Sardin: ad terram in sylvestribus MORIS st: sard: III. p. 18. sub Cenomycide. Habeo ex Chambery ab HUGUEN: cum var: ζ *fastuosa* DELIS:). Thallus sub-nullus, podetia rigida attenuata ramosa axillis imperforatis ramis furcatis aliis sterilibus aliis fertilibus; in hisce apothecia sub-globosa nigro-fusca. Variat multimode.*

= \* 5. *Cl: subulata* = Nob: = *Cenomycyce ecmocyna* var: δ Ach: lich: univ: p. 540. *Lichen subulatus* L. sp: 1621. aliique. Sub *Cladonia furcata* Spr: syst: IV. 270. male = Dill: musc: t. 16. f. 20. (*Eur: passim ad terram. Pedem: in pascuis et sylvis sterilibus Alpium et in pascuis sylvaticis collium Taurinens: circa Su-*



*perga* ALL: n. 2587. RE fl: segus: p. 89. ambo sub *Lichene*. In sylvis alpinis inter muscos BIROLI fl: acon: II. p. 205. sub *Bæomycide*). Priori affinis, sed differt præsertim indole podetiorum quæ in collum angustum coarctantur antequam in scyphum abeant; insuper eorum rami subulati, in fertilibus scyphi nulli. *Cenomyce ecmocyna* var:  $\alpha$  *elongata* crescit etiam in *Pedem*: speciatim supra tellurem in alpinis *Monregalensibus* (RE app: I. p. 44.), et differt a typo podetiis longissimis, scyphis ex apotheciis minutis nigricantibus denticulatis vel sub-obsoletis.

\* 6. *Cl: rangiferina* = Spr: syst: IV. 270. ex Hoffm: = Sub *Cenomycide* Ach: lichen: univ: p. 564. Sub *Lichene* L. sp: 1620. aliique = Dill: musc: t. 16. f. 29. A B (Ad terram in sylvis montanis *Eur*., *Amer*: et *Asiæ*. *Pedem*: in sylvis sterilibus alpinis et sub-alpinis passim ALL: n. 2583. RE fl: segus: p. 89. ambo sub *Lichene*. Nil in pascuis macilentis vulgatus RE fl: tor: II. p. 249. sub *Cenomycide*. In pascuis et ericetis *Ticini* collium montium et alpium BIROLI fl: acon: II. p. 204. sub *Bæomycide* cum var: *sylvatica*. *Sardin*: ad terram in montanis MORIS st: sard: III. p. 18. sub *Cenomycide* pro var:  $\delta$ . *Sabaud*: BILLET in litt:). Thallus sub-nullus, podetia valde elongata teretia erecta ramosissima nuda albo-cinascencia axillis sub-perforatis ramulis sub-nutantibus, apothecia in ramulis fertilibus minuta fusca sparsa vel sub-quaterna. Varr: plures enumerat Ach: l. c.; perspicua est quam refert ALL: sub *Lichene sylvatico* n. 2584., a quo tamen excludendum syn: L. perti-

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tinens ad *Stictam*; planta ALL: in pascuis et sylvis sterilibus Alpium occurrens differt tantum a *Cl: rangiferina* podetiis albis, ramis inferioribus rarioribus, statura generatim minori, apotheciis sparsis rufescentibus (DILL: musc: t. 16. f. 30. B). Eandem habeo ab HUGUEN: e *Sabaud*: sub nomine *Cenomycidis sylvaticæ* FLORE: Planta MORISII e *Sardin*: videtur referenda ad *Cl: rangiformem* SPR: syst: IV. 270. ex HOFFM.; differens solum a *rangiferina* podetiis filiformibus cæspitosis; axillis imperforatis.

\* 7. *Cl: racemosa* = SPR: l. c. 271. ex Hoffm: = Sub *Cenomycide* Ach: syn: 275. = Ic: ? (Ad terram et truncos arborum. Habeo ex *Chambery* ab HUGUEN: cum var:  $\gamma$  *rangifera* et *cochleata* DELIS: in litt:). Thallus sub-nullus podetiis rectis elongatis tortuosis lævibus albo-virescentibus tandem inflatis curvatis divergenti-ramosis ramis laxis sub-secundis apice spinulosis, apothecia terminalia aggregata pallide fusca in typo, axillaria et terminalia sub-rotunda pallidiora in var:  $\gamma$  *rangifera*, terminalia orbicularia majora fusca in *cochleata*.

### B *Thallo foliaceo.*

#### a Podetiis apice dilatatis simplicibus.

\* 8. *Cl: symphyarpa* = SPR: syst: IV. 271. = Sub *Cenomycide* Ach: lichen: univ: p. 568. Sub *Lichene* Ehrh: alique = *L. fuscus* Hoffm: enum: lich: p. 39. t. 8. f. 4. (*Eur*: ad terram. *Pedem*: ubertim supra tellurem in sterilibus pascuis *della Praglia di Pianezza* RE app: I. p. 44. et fl: tor: II. p. 249. sub

*Cenomycide*. Habeo ex *Chambery* ab HUGUEN: ). Thalli lobi minuti imbricati supra e cinereo fusco-virescentes, podetia brevialba apice sub-ramosa ramis brevissimis fastigiatis, apothecia conglomerata dilute fusca. Perperam stirpem hanc disjunxit SRR: a *Lichene fusco* HOFFM:

\* 9. *Cl. parasitica* = Hoffm: enum: lich: p. 39. t. 8. f. 5. = Spr: syst: IV. 272. = *Cenomyce delicata* Ach: lich: univ: p. 569. *Lichen delicatus* Ehrh: aliique (*Eur*: ad truncos arborum. *Pedem*: supra arborum cortices in sylvis collium *Taurin*: BALB: misc: bot: p. 8. sub *Lichene delicato*. RE fl: tor: II. p. 249. sub *Cenomycide delicata*. Habeo ex *Chambery* ab HUGUEN: sub *Cenomycide delicata*). Thalli lacinulæ minutæ eroso-lacinulatæ imbricatæ granulato-pulverulentæ, podetia glabra nuda vel granulata pallida apice sub-divisa ramis brevissimis, apothecia conglomerata fusco-nigra.

10. *Cl. botrytes* = Spr: syst: IV. 271. Sub *Cenomycide* Ach: lich: univ: p. 569. tab. XI. f. 4. (*Eur*: ad truncos arborum. *Sardin*: iisdem locis in montanis MORIS st: sard: III. p. 18. ). A priori dignoscitur præsertim statura undique valde majori, podetii ramis terminalibus fastigiatis, apotheciis sub-peltatis simplicibus luteolis.

\* 11. *Cl. cariosa* = Spr: syst: IV. 272. = Sub *Cenomycide* Ach: lich: univ: p. 567. tab: XI. f. 5. = Sub *Lichene* Schrad: aliique (*Eur*: ad terram sterilem. *Pedem*: in sylvis della *Mandria* nec non in prov: *Segus*: vulgaris RE app: I. p. 43. et fl: tor: II. p. 249. ). Thalli lobulis crenulatis pallide virescentibus subtus



albis, podetiis elongatis albis carioso-cancellatis, apotheciis magnis convexis fusco-nigris a præcedentibus hujusce sectionis facile distinguitur.

\* 12. *Cl: parecha* = Spr: syst: IV. 272. = Sub *Cenomycide* Ach: lich: univ: p. 272. = Sub *Lichene* Ach: nov: act: Stockh: vol. XXII. p. 340. t. 4. f. 2. *Lichen diffusus* Lam: sec: Steud: non Dicks: nec Web: (*Eur: passim. In pascuis sterilibus et dumetis comit: Nicæens: ALL: auct: n. 2575. \*\* p. 52. sub Lichene diffuso. Sabaud: BILLET in litt: sub Scyphophoro diffuso*). A præcedentibus dignoscitur præsertim thalli laciniis angustatis pinnatifidis, scyphis obconicis lacero-dentatis in podetia ventricosa ramosa apice denticulata abeuntibus, apotheciis denticulorum minutis fuscis. De synon: ab ALL: citatis silent Ach: et Spr:

*β* Podetiis apice scyphiferis.

\* 13. *Cl: foliacea* = Spr: syst: IV. 272. = *Cenomycide alcicornis* Ach: lich: univ: p. 529. *Lichen alcicornis* et *foliaceus* quorund: = Dill: musc: t. 14. f. 12. A D pro typo et B C pro var: *β cladomorpha* (Ad terram sterilem *Eur: Asiæ. Pedem: in sterilibus prope Sturam* RE fl: tor: II. p. 246. sub *Cenomycide alcicorni*. In ericetis vulgaris BIROLI fl: acon: II. p. 203. sub *Bæomycide alcicorni*. *Sabaud: BILLET in litt: sub Scyphophoro convoluto et endiviæfolio. Sardin: ad terram sterilem et ad rupes MORIS st: sard: III. p. 18. sub Cenomycide*). Thallus profunde laciniatus laciniis adscendentibus inflexis dentato-repandis pallide virescentibus subtus albis, scyphi elevati tur-

binati integri vel crenati margine apothecia sessilia rubra proferentes.

\* 14. *Cl. cornuopiciæ* = Spr: l. c. 272. = *Cenomyce endiviæfolia* Ach: lich: univ: p. 528. *Lichen endiviæfolius* Dicks: crypt: III. p. 17. = Michel: gen: t. 42. f. 3. (Ad terram in ericetis sterilibus. Habeo ex *Sabaud:* ab HUGUEN:). Thallus amplissimus glauco-virescens subtus niveus laciniis multifidis flexuosis imbricatis crenato-crispis podetiis turbinato-scyphiformibus simplicibus, apothecia rufescentia.

\* 15. *Cl. cinerea* = Spr: syst: IV. 272. ex Pers: = *Cenomyce cervicornis* Ach: lichen: univ: p. 531. = Sub *Lichene* Ach: in nov: act: Stockh: vol. XXII. p. 342. t. 4. f. 3. Engl: bot: t. 2574. (Ad terram supra saxa inter muscos *Sueciæ*, *Galliæ*. *Pedem:* in ericetis *Ticini* frequens BIROLI fl: acon: II. p. 202. sub *Bæomyce*). A priori, cui affinis, diversa præsertim thallo supra glauco-virente, laciniis elongatis erectis, scyphis parvis dilatato-peltatis, apotheciis fusco-nigris.

\* 16. *Cl. neglecta* = Spr: l. c. 273. = Sub *Cenomyce* Flork: *C. Pocillum* Ach: syn: 253. = *Bæomyces Pocillum* Ach: meth: t. 8. f. 6. (Ad terram apricam sterilem. Habeo ex *Sabaud:* ab HUGUEN: cum var:  $\beta$  *polyphæma* DELIS:). Thalli laciniæ crassæ latiusculæ lobato-crenatæ depresso-imbricatæ olivaceæ nitentes subtus nivææ podetiis omnibus turbinato-scyphiformibus cum diaphragmate verrucosis albo cæsius-pruinosis scyphis regularibus margine integro demum prolifero, apothecia marginalia minuta nigro-fusca. In var:  $\beta$  podetia maxima dilatata, scyphi lacini, apothecia ampla.

\* 17. *Cl. comiocraea* = Spr: l. c. p. 272. = Sub *Cenomycide* Flork: deutsch: lich: n. 139. = Ic: ? (Ad terram et truncos vetustos in sylvis. Habeo ex *Chambery* ab HUGUEN: cum var:  $\delta$  *clavarioides*). Thallus minutus rotundato-crenulatus virescens subtus albicans podetiis elongatis simpliciusculis subuliformibus basi glabris virescentibus medio pulverulentis supra albicantibus, apothecia terminalia sub-fusca. Variat modis indicatis a DUBY bot: gall: p. 629.; in var: *clavarioide* thallus sub-palmatus, podetia sub-ventricosa viridia apice cornuta, apothecia solitaria brunnea.

\* 18. *Cl. pyxidata* = Spr: syst: IV. 273. excl: syn: Ach: = Sub *Cenomycide* Ach: lich: univ: p. 534. Sub *Lichene* L. sp: 1619. aliique = Dill: musc: t. 14. f. 6. A B pro var:  $\alpha$  (*Lichen simplex* Roth.); tab: 14. f. 11. pro var:  $\beta$  (*Cladonia axilis* Hoffm.); tab: 14. f. 8. B pro var:  $\gamma$  (*Lichen fimbriatus* L.); tab: 14. f. 6. C I K L pro var:  $\eta$  (*Cladonia tuberculosa* et *marginalis* Hoffm.). (Supra terram in ericetis et saxis *Eur.*, *Asiæ*, *Amer.* bor: *Pedem.* nihil frequentius in sylvis montanis et collinis ALL: n. 2577. RE fl: segus: p. 89. ambo sub *Lichene*. In omnibus sylvis et in pascuis sterilibus frequens RE fl: tor: II. p. 246. sub *Cenomycide*. In collibus *Taurin.* et ad sylvarum margines prope *la Praglia di Pianezza* RE l. c. p. 248. sub *Cenomycide allotropa*. In pascuis saxosis frequens BIROLI fl: acon: II. p. 202. sub *Bæomycide*. *Sabaud.* BILLET in litt: sub *Scyphophoro pyxidato*. *Sardin.* ad terram, truncos arborum, saxa vulgatissima MORIS st: sard: III. p. 18. sub *Cenomycide*). Thalli lobuli minuti imbricati, podetia brevia a basi sensim in scy-



phum cyatiformem amplum dilatata, nunc nuda nunc pulverulenta granulosa verrucosa vel squamosa alba pallida vel cinerea, scyphi sub-integri margine apothecia demum maxima conglomerata semper obscura fusca et badia gerentes; stirps summopere polymorpha. *Lichen fimbriatus* ALL: n. 2578. ex L. penes nos communis non differt a *pyxidato* nisi scyphorum margine fimbriato-dentato. Habeo ex *Sabaud*: ab HUGUEN: var:  $\varepsilon$  *proligeram* DELIS: , in qua podetia sunt ampliatio-dilatata, scyphorum radii repetito-prolificantes.

19. *Cl: verticillata* = Hoffm: pl: germ: p. 122. *Cl: pyxidatæ* var: Spr: syst: IV. 273. *Cenomyce allotropa* var:  $\delta$  Ach: lichen: univ: p. 555. (*Eur: passim*. Habeo ex *Sabaud*: ab HUGUEN: sub *Cenomycide verticillata*. *Sardin*: ad terram saxaque in sylvaticis MORIS st: sard: III. p. 18.). Podetia cylindrica breviuscula e scyphorum diaphragmate scyphulis novis solitariis aggregatisque repetito-proliferis.

\* 20. *Cl: radiata* = Nob: = Sub *Cenomycide* Ach: lichen: univ: p. 547. *Cladonia pyxidata* var: Spr: syst: IV. 573. *Lichen radiatus* Schreb: alii que = Dill: musc: t. 15. f. 16. (*Eur: ad truncos putridos et supra terram in saxis et montibus. Pedem: in alpibus Javensib: BALBIS de crep: p. 8. Re fl: segus: p. 90. ambo sub Lichene. In sylvis della Mandria Re fl: tor: II. p. 247. sub Cenomycide. Super terram inter rupes alpinas vulgaris BIROLI fl: acon: II. p. 203. sub Bæomycide. Sardin: ad truncos terram saxaque in montanis MORIS st: sard: III. p. 18. sub Cenomycide ubi Cl: fimbriatam, radiatam et abortivam conjungit). *Cl: pyxidatæ* valde affinis, sed differt thallo plerumque*

*evanescente*, podetiis *elongatis* teretibus apice *obtusiusculis* vel scyphiferis tandem *ramosis*, scyphis *demum digitato-radiatis*.

\* 21. *Cl: cornuta* = Nob: = Sub *Cenomycide* Ach: lichen: univ: p. 545. *Cladonia pyxidata* var: Spr: syst: IV. 273. *Lichen cornutus* L. aliique = Dill: musc: t. 15. f. 14. (*Eur:* passim ad terram in sylvis. *Pedem:* frequens in sylvis sterilibus glareosis ALL: n. 2581. Supra Alpes RE fl: segus: p. 89. ambo sub *Lichene*. Inter rupes alpinas frequens BIROLI fl: acon: II. p. 203. sub *Bæomycide*. *Sabaud:* BILLET in litt: sub *Scyphophoro*). Tribus præcedentibus, cum quibus confusa a SPR:, proxima, differt tamen podetiis *cylindræo-ventricosis acuminatis*, scyphis *cylindricis sub-integris*, apotheciis *minutis*; variat et ipsa modis indicatis ab Ach: l. c.

\* 22. *Cl: gracilis* = Spr: syst: IV. 273. ex Hoffm: = *Cenomyce ecmocyna* var:  $\gamma$  Ach: lichen: univ: p. 550. *Lichen gracilis* L. aliique = Dill: musc: t. 14. f. 13. C D E (*Eur:* ad terram. *Pedem:* vulgaris in sylvis sterilibus ALL: n. 2579. Ad radices arborum emortuarum RE fl: segus: p. 89. ambo sub *Lichene*. In collium sylvis RE fl: tor: II. p. 247. sub *Cenomycide ecmocyna*. Inter rupes alpinas BIROLI fl: acon: II. p. 203. sub *Bæomycide*). Ludit inter *Cl: ecmocynam* et *pyxidatam*; ab utraque differt podetiis *strictis filiformibus attenuato-acuminatis* demum *ramosis* quibusdam tantum *scyphiferis*, apotheciis *minutissimis* in dentibus *scyphorum radiatorum*. Possideo varr: plures ex HUGUEN: in *Sabaud:* lectas, sc:  $\beta$  *filiformis* FLORE:,  $\zeta$  *elongata* Ach:,  $\eta$  *macroceras* Ach:,  $\theta$  *va-*

*lida* Ach.; i *exoncera* Ach.; et *Hugueninii* Delis: in litt: Hæc ab omnibus varr: a cl: DUBY bot: gall: p. 624. 625. enumeratis prima facie distinguitur podetiis crassissimis apice valde ventricosus olivaceis albo-squamiferis.

\* 23. *Cl: cenotea* = Spr: syst: IV. 273. = *Cenomyce gonorega* var:  $\alpha$  Ach: lichen: univ: p. 551: = *Bæomyces cenoteus* Ach: meth: t. 7. f. 7. (*Eur: ad truncos putridos. Pedem: in prov: Monregalensi legit RE app: I. p. 43. Habeo ex Chambery ab HUGUEN:).* Thallus ut in præcedentibus, podetia sub-ventricosa albo-pulverulenta e margine scyphorum repetito-prolifera scyphis inferioribus perviis, apothecia denticulorum minutissima nigra.

\* 24. *Cl: squamosa* = Spr: l. c. 273. ex Hoffm: = Sub *Cenomycide* DUBY bot: gall: p. 625. ex Delis: mss: *Cenomyce Sparassa* Ach: syn: 274. = Ic: ? (*In caudicibus et truncis arborum putrescentium. Habeo ex Sabaud: ab HUGUEN: cum var:  $\eta$  crassa DELIS:).* Thallus minutus lobato-crenatus podetiis cæspitosis elongatis sub-ventricosus granulatis verrucoso-squamosis albicantibus scyphiferis, scyphis irregularibus dentato-radiatis prolificantibus, apothecia pedicellata pallide fusca. Var:  $\eta$  *crassa* gaudet podetiis crassioribus, apotheciis magnis.

\* 25. *Cl: bacillaris* = Nob: = Sub *Cenomycide* Ach: lichen: univ: p. 54. = *Cladonia polydactyla* var: Spr: syst: IV. 274. (*Eur: passim. Sardin: ad ligna putrescentia MORIS st: sard: III. p. 18. sub Cenomycide. Habeo ex Chambery ab HUGUEN:).* Podetia elongata filiformia simplicia, scyphi cylindracei vel nulli mar-



gine integerrimi, apothecia in apice podetiorum vel margine scyphorum sessilia vel pedicellis suffulta coccinea.

\* 26. *Cl: digitata* = Spr: syst: IV. 274. ex Hoffm: = *Cenomyce deformis* var:  $\gamma$  Ach: lichen: univ: p. 539. *Lichen digitatus* L. aliique = Dill: musc: t. 15. f. 19. A B et f. 18. B (*Eur: ad truncos arborum et in terra. Pedem: vulgaris in sylvis sterilibus ALL: n. 2580. sub Lichene*). Podetia cylindracea in scyphum amplum irregularem digitato-laciniatum evanescentem abeuntia demum sub-divisa, apothecia dentium terminalia minuta coccinea tandem majora obscure rubra. Habeo ex *Chambery* ab HUGUEN: var: *apophysis* DELIS: in litt: a DUBY bot: gall: p. 633. haud enumeratam, quæ gaudet podetiis crassis squamuloso - sulphureo - pulverulentis.

\* 27. *Cl: deformis* = Spr: syst: IV. 274. ex Hoffm: = Sub *Cenomycide* Ach: lichen: univ: p. 238. = Sub *Lichene* L. fl: lapp: t. 11. f. 5. Dill: musc: t. 15. f. 18. A (*Eur: ad terram. Pedem: in montanis sylvis sterilibus ALL: n. 2582. In apricis editioribus supra Alpes RE fl: segus: p. 89. ambo sub Lichene. In sylvis della Mandria RE fl: tor: II. p. 240. sub Cenomycide. Habeo ex Sabaud: in M. de Grenier ab HUGUEN: sub ead:* ). Differt a priori, cujus typus sec: Ach: , podetiis valde crassis *ventricoso - clavatis* nec cylindraceis *sulphureis*, scyphis *minutis obtuse dentatis* nec *digitatis*.

\* 28. *Cl: coccifera* = Spr: syst: IV. 274. ex Baumg: = Sub *Cenomycide* Ach: lichen: univ: p. 537. tab: XI. f. 3. Sub *Lichene* L. aliique = Dill: musc: t. 14.

f. 7. (*Eur:* montibus ad terram. *Pedem:* nihil frequentius in sylvis montanis et collinis ALL: n. 2575. sub *Lichene*. In sylvis et in pascuis sterilibus valde frequens RE fl: tor: II. p. 247. sub *Cenomycide*. Ad rupes in umbrosis etiam circa *Novariam*, ubi varr: omnes ab Ach: descriptæ non raro occurrunt BIROLI fl: acon: II. p. 202. sub *Bæomycide*. Habeo ex *Chambery* ab HUGUEN: ). Hæc etiam summopere prioribus affinis et vix distincta podetiis *brevibus* cylindræo-obconicis, scyphis *amplis integris*; habet tamen duas proprias varr:, inter quas memoratu dignus *Lichen cornucopioides* (L. sp: 1619. DILL: muse: t. 14. f. 9.) repertus ab ALL: in sylvis sterilibus quæ ex villa *Avenatica* usque ad Alpes porriguntur (ALL: n. 2576.), in quo scyphi sunt dilatati e diaphragmate et margine foliaceo - crispo.

\* 29. *Cl: polycephala* = Spr: l. c. ex Hoffm: = Sub *Cenomycide bellidiflora* Ach: syn: p. 270. = Sub *Lichene* Ach: in nov: act: Holm: XXII. t. 14. f. 1. a (Ad terram in locis montanis et subalpinis. Habeo ex *Chambery* ab HUGUEN: sub *C. bellidiflora* var: *polycephala*). Thallus foliaceus minutus laciniis inciso-crenatis subtus nudis podetiis crassis cylindricis apice sub-divisis, scyphis dilatatis demum obsoletis, apothecia confertissima sessilia vel pedicellata coccinea.

\* 30. *Cl: incana* = Spr: l. c. 274. ex Hoffm: = *Cenomycete pleurota* Ach: syn: 270. = DILL: muse: t. 14. f. 6. B (In terra aprica lignisque putridis rara. Habeo ex *M. de Grenier* in *Sabaud:* ab HUGUEN: ). Thalli laciniæ inciso-crenatæ subtus nude podetiis

obconico - scyphiformibus pulverulentis albo - pallido - virescentibus, scyphis ampliatis demum lacunosis subcostatis margine sub-integro demum sinuato vel radiato, apothecia sub - pedicellata coccinea.

\*? 31. *Cl: coralloidea* = Nob: = Sub *Cenomycide* Ach: lichen: univ: p. 528. (Ad terram in fissuris rupium *Sueciæ* Ach: l. c. *Pedem: prope Venariam* Rē fl: tor: II. p. 246. sub *Cenomycide*). « Thallo laciniato, » laciniis linearibus diffusis ramosis apice palmato - » digitatis verrucosis subtus sub - canaliculatis, apo - » theciis terminalibus confertis sub-sessilibus fuscis. » Char: ex Ach: Fide cl: Rē numero inter pedemontanas hanc stirpem numquam a me visam.

V. STEREOCAULON Spr: syst: n. 3377. ex Schreb: = Ach: lichen: univ: p. 113. tab: XX. = *Bæomycidis*, *Isidii*, *Lecanoræ*, et *Parmeliæ* spec: perpaucae quorund: (Inter *Hymenothalamos* cl: IV., *Discoideos* ord: 1. Fries).

» *Apothecia* hemisphærica marginata podetiis solidis » fruticulosis sustenta. *Lamina* prolifera carneo - cor - » nea substantia thallode substrata margine destituta. »

*Obs:* Genus, præter notas allatas, satis distinctum thallo sub-lignoso solido fruticuloso-ramoso, constans 10-12. stirpibus, inter quas plures exoticæ.

\* 1. *St: paschale* = Ach: lichen: univ: p. 581. tab: XII. f. 4. = Spr: syst: IV. 274. Sub *Lichene* L. sp: 1621. = Dill: musc: t. 17. f. 33. (*Eur.*, *Amer:* bor: *Pedem:* frequens in summis Alpibus locis alpestribus ALL: n. 2588. Rē fl: segus: p. 89. ambo sub *Lichene*. Supra tellurem in sterilibus della *Praglia*



*di Pianezza et in sylvis della Mandria* RE fl: tor: II. p. 251. Super rupes et in pascuis collium frequens BIROLI fl: acon: II. p. 200. *Sardin:* ad terram saxaque monte *Santo Terralba* MORIS st: sard: III. p. 22. *Sabaud:* BILLET in litt:). Thallus cinereo-cæsius undique granulis crustaceis crenulatis imbricatus ramis confertis brevibus ramulosissimis, apothecia sparsa demum convexa conglomerata nigro - fusca.

2. *St: intricatum* = MORIS st: sard: III. p. 22. (*Sardin:* ad arbores in monte *Burcei* MORIS l. c.). Differt a priori thallo cinereo - *flavescente*, ramis longiusculis tortuosis implexis, apotheciis solitariis olivaceo-fuscis. Magis accedit, monente MORISIO, ad *St: ramulosum* ACH: = 3. *St: plicatum?* var: *dactylinum* = SPR: syst: IV. 275. *St: plicatum* et *Isidium dactylinum* Ach: lichen: univ: p. 582. 576. *I. stalactiticum* MORIS, *melanochlorum* DC. (*Sardin:* in saxosis ins: *S. Pietro* et *Pula* MORIS st: sard: IV. p. 19.). Plantam non vidi.

VI. PARMELIA SPR: syst: n. 3378. = *Parmeliæ*, *Corniculariæ*, *Roccellæ*, *Borreriæ*, *Usneæ*, *Dufoureiæ*, *Collemæ*, *Alectoriæ*, *Ramalinæ*, *Everniæ*, *Citrariæ*, *Lecanoræ*, *Endocarpon*, *Urceolariæ*, *Vario-lariæ*, *Porinæ*, *Tagediæ*, *Thelotremæ*, *Isidii*, *Lecideæ*, *Gyalectæ*, *Pyrenulæ* stirpes Ach: (Inter *Hymenothalamos* cl: IV., *Discoideos* ord: 1. Fries).

» *Apothecia* urceolata scutellata disciformia. *Lamina* proligerâ substantia thallode strato corticali  
» tecta substrata. »

Obs: Sub hoc genere alia multa Achariana conjunxit SPR: forsân nimis leviter eo magis quod in-

numerae scatent species (270. circiter), unde extricator fiat earum determinatio; attamen si characteres unicuique ex iisdem generibus ab Ach: tributos rite perpendamus, manifestum erit, nullum tam essenziale et constans adparere, quo unum ab altero genere rite distinctum evadat. Ceterum sectionibus Sprengelianis receptis et non omisso pro unaquaque stirpe Ach: synonymo, omnis evanescit difficultas ab earum numero enascens.

### I. Thallo cæspitoso, ramoso.

#### \* *Ramis teretiusculis.*

\* 1. *P. tristis* = Spr: syst. IV. 276. = Sub *Cornicularia* Ach: lichen: univ: p. 610. tab: XIV. f. 2. = Sub *Lichene* Web: spicil: fl: gött: p. 209. t. 5. f. 1. 3. Dill: musc: t. 17. f. 37. (*Eur: alpibus. Pedem: rupes inhabitat locis editis et vento perflatis prope la Madonna delle Finestre ALL: auct: n. 2588.\* p. 52. Re fl: segus: p. 89. ambo sub Lichene. Ad rupes alpinas frequentissima varians colore plus minus fusco BIROLI fl: acon: II. p. 198. sub Cornicularia. Sardin: ad rupes editiores Genargentu MORIS st: sard: III. p. 19. sub ead: Sabaud: BILLET in litt: sub ead:). Thallus glaber fuscus ramis fastigiatis superne nigris, apothecia convexa fusco-atra sub-marginata sub-integra. Variat apotheciorum margine radiato-denticulato (*Lichen radiatus* HUDS:), vel ramulis tuberculato-denticulatis (*Lichen fucoides* WULF:).*

\* 2. *P. Roccella* = Ach: meth: p. 274. = Spr: syst. IV. 276. *Roccella tinctoria* Ach: lich: univ: p.

439. *Lichen Roccella* L. aliique. = Dill: musc: t. 17. f. 39. (Ad rupes marinas *Eur: austr: ins: Canariis et Azoricis*. Ad rupes maris *Nicæens: ALL: n. 2589. sub Lichene*. Habeo ex *Sardin: a BELLARD: non a MORIS*). Thallus glauco-viridis ramis albidis glauco-pruinosis sub-simplicibus erectiusculis ad singula apothecia flexis, apothecia sparsa nigrescentia abortientibus verrucosis fariniferis.

\* 3. *P. ochroleuca* = Ach: meth: p. 271. = Spr: syst: IV. 276. Sub *Cornicularia* Ach: lich: univ: p. 614. Sub *Lichene* Ehrh: aliique. *Lichen rigidus* Vill: non Wulf: = Hoffm: pl: lich: t. 26. f. 2. (In alpib: *Eur: passim. Pedem: iisdem locis BELLARD: app: p. 69. sub Lichene rigido*. Ad truncos arborum in alpibus frequenter occurrit BIROLI fl: acon: II. p. 193. *Sabaud: BILLET in litt: sub Cornicularia*). Thallus glaber albo-vel flavido-pallescent ramis fibrillosis attenuatis apice nigricantibus, apothecia fusca margine pallida.

\* 4. *P. florida* = Spr: syst: IV. 276. = Sub *Usnea* Ach: lich: univ: p. 620. tab: XIV. f. 5. Sub *Lichene* L. aliique. = Dill: musc: t. 13. f. 13. (In arborum truncis *Eur: et Amer: bor: Pedem: vulgaris in sylvis montanis et subalpinis ad arbores emortuas ALL: n. 2597. Abunde ad pinos supra il Bosco nero et in Exilliarum alpibus RE fl: segus: p. 89. ambo sub Lichene*. In ramis arborum in sylvis alpinis non raro occurrit BIROLI fl: acon: II. p. 199. sub *Usnea. Sabaud: BILLET in litt. sub ead:*). Thallus scabridus cinereo-pallidus sub-erectus ramis patentissimis expansis simpliciusculis, apothecia latissima planiuscula carneo-pallida radiato-ciliata.



\* 5. *P. plicata* = Spr: syst: IV. 276. = Sub *Usnea* Ach: lich: univ: p. 622. tab. XIV. f. 6. *Lichen plicatus* et *hirtus* L. aliiq. = Dill: musc: t. 11. f. 1. pro *plicato* et t. 13. f. 12. pro *hirto* (*Eur:* ad arbores. *Pedem:* in sylvis montanis frequens ALL: n. 2590. sub *Lichene plicato*, in sylvis montanis et sub-alpinis ad arbores emortuas n. 2595. sub *L. hirta*. In sylvis alpinis *di Mompantero* et *della Losa* RE fl: segus: p. 89. sub eod: Cum priori BIROLI fl: acon: II. p. 199. sub *Usnea florida* var: *plicata*. *Sabaud:* BILLET in litt. sub *Usnea plicata*. *Sardin:* ad ramos Quercuum monte *S. Pula* pro var: *hirta* MORIS st: sard: III. p. 22. sub *Usnea*). Differt a priori cum qua sæpe ab Auctoribus confusa, thallo elatiori pendulo debiliore levigato, ramis vix sub-fibrillosis, apotheciis minoribus et rarioribus. Variat tamen thallo erectiusculo scabriusculo (*Lichen hirtus*) etc.

\* 6. *P. auriculata* = Spr: syst: IV. 277. = *Usnea barbata* Ach: lich: univ: p. 624. *Lichen barbatus* L. et *articulatus* Huds: aliiq. = Dill: musc: t. 12. f. 6. pro *barbato* et t. 11. f. 4. pro *articulato* (*Eur:* ad arbores. *Pedem:* in alpibus *Fenestrellarum* ALL: n. 2591. sub *Lichene barbato*. BIROLI fl: acon: II. p. 200. sub *Usnea barbata* sine loci indicatione. *Sabaud:* BILLET in litt: sub ead: *Sardin:* ad ramos arborum in sylvis MORIS st: sard: III. p. 22. sub ead:). Parum discedit a præcedenti thallo minus ramoso et implexo evidenter inferne præsertim *articulato*; apotheciis nudis. Variat thallo scabro vel glabro, plus minus crasso, lutescenti- vel cinereo-viridi, etc.

\* 7. *P. jubata* = Ach: meth: p. 272. = Spr:

syst: IV. 278. Sub *Alcetoria* Ach: lich: univ: p. 592. tab: XIII. f. 1. *Lichen jubatus* et *chalybeiformis* L. aliique = Dill: musc: t. 12. f. 7. pro *L. jubato* et t. 13. f. 10. pro *chalybeiformi* (Ad *Eur: arbores. Pedem: in sylvis abjegnīs alpium frigidiorum frequens ALL: n. 2593. sub Lichene. In truncis Fagi, Laricis et Piceæ in Alpibus vulgarissima ubi et varr: capillaris et implexa* occurrunt BIROLI fl: acon: II. p. 193. *Sardin: ad arbores saxaque Arizzo MORIS st: sard: III. p. 18. sub Alectoria* pro var: *chalybeiformi. Sabaud: BILLET in litt: sub Cornicularia*). Thallus altissimus ramosissimus ramis filiformibus sub-fistulosis pendulis sæpius nigrescentibus colore tamen variantibus, apothecia minuta plana fusca marginata thallo sæpius concoloria abortientia verrucosa pruinosa. Var: *chalybeiformis* gaudet ramis brevioribus flexuosis tortuosis complicatis nigro-piceis.

\* 8. *P. madreporiformis* = Spr: syst: IV. 278. = Sub *Dufourea* Ach: lich: univ: p. 525. = Sub *Lichene* Wulf: in Jacq: coll: III. t. 3. f. 2. (In rupibus *Austriæ, Helvet: Habeo ex Pedem: lectam a CUMINO supra lapides sub-humidos septentrioni expositos ad crucem B. Antonii prope Chartasiam vallis Pisi*). Thallus ramosissimus cæspitosus albo-fuscus ramis brevibus turgidis fastigiatis sub-fistulosis; apothecia non vidi, nī pro illis habeas puncta minutissima rufescentia oculis nudis vix conspicua quae sub lente apparent in apicibus ramorum.

\*\*\* *Ramis compressis.*

9. *P. fuciformis* = Ach: meth: p. 258. = Spr: syst: IV. 279. excl: syn: Dicks: Sub *Roccella* Ach: lich: univ: p. 440. = Dill: musc: t. 23. f. 61. (*Eur: maritimis, Ind: orient: Sardin: ad arbores vetustas putrescentes Cagliari* MORIS st: sard: III. p. 21. sub *Roccella*). Thallus coriaceus albo-cinereo-virescens laciniato-planus lacinulis attenuatis ramosis apice furcatis, apothecia marginalia atra. = 10. *P. phycopsis* = Nob: Sub *Roccella* Ach: lich: univ: p. 440. *P. fuciformis* var: Spr: syst: IV. 279. Dill: musc: t. 22. f. 60. (*Locis maritimis Angliæ, Galliæ. Sardin: subter rupes maritimas vulgatissima* MORIS st: sard: III. p. 21. sub *Roccella*). A priori distinguitur thallo ramosissimo teretiussculo, ramulis extimis abbreviatis fastigiatis, apotheciis veris sub-nullis, sorediis planis sub-marginatis.

\* 11. *P. polymorpha* = Ach: meth: p. 265. = Spr: syst: IV. 279. Sub *Ramalina* Ach: lich: univ: p. 600. = *Lichen polymorphus* Ach: nov: act: Stockh: vol. XVIII. p. 270. t. 11. f. 3. Dill: musc: t. 21. f. 57. *Lichen tinctorius* Web: Dill: musc: t. 21. f. 57. E (*Ad Eur: rupes. Pedem: in saxis Pollein, Reverires et Metur in valle Aug: Prætor: BALB: misc: p. 48. In montanis di Mocchie ad saxa præsertim loco dicto il Pilon del Taluc prope viculum dei Cinati* RE fl: segus: p. 90. ambo sub *Lichene*. In *M. Musiné* et in sylvis della *Mandria* RE fl: tor: II. p. 252. sub *Ramalina*. In truncis arborum præsertim *Laricis* uti et in rupibus crescit cum var: *tinctoria* BIROLI fl: acon: II. p. 192. sub



*Parmelia. Sabaud:* BILLET in litt: sub *Physcia*). Thallus plano-compressus vel teretiusculus laciniato-ramosus cinereo-pallidus, apothecia sub-terminalia ampla peltata convexiuscula thallo concolaria. Variat præsertim magnitudine et compositione laciniarum; in var: *tinctoria* istæ sunt pinnatifidæ lineari-lacunosæ interdum anastomosantes.

\* 12. *P. fraxinea* = Ach: meth: p. 258. = Spr: syst: IV. 279. Sub *Ramalina* Ach: lich: univ: p. 602. Sub *Lichene* L. aliiq. = Dill: musc: t. 22. f. 59. et 59. C pro var:  $\delta$  *ampliata* (Ad arbores *Eur:*, *Asiæ* et *Amer:* bor: *Pedem:* frequentissima locis montanis in sylvis ad corticem arborum ALL: n. 2563. sub *Lichene*. In truncis arborum præsertim Fraxini et Fagi BIROLI fl: acon: II. p. 191. sub *Parmelia. Sardin:* ad corticem arborum *Arizzo* MORIS st: sard: III. p. 21. sub *Ramalina. Sabaud:* BILLET in litt: sub *Physcia*). Thallus planus albo-cinereus glaber rugoso-lacunosus laciniis elongatis lanceolatis lacinulatis, apothecia marginalia plana grandiuscula incarnata. Var:  $\delta$  *ampliata* gaudet laciniis et apotheciis multoties latioribus.

\* 13. *P. fastigiata* = Ach: meth: p. 260. = Spr: syst: IV. 279. Sub *Ramalina* Ach: lich: univ: p. 603. = Sub *Lichene* Ach: in nov: act: Stockh: vol. XVIII. p. 207. t. 9. f. 1. A F aliiq. Dill: musc: t. 21. f. 55. B G et t. 23. f. 62. pro var:  $\beta$  *calicari* (Ad *Eur:* arbores. *Pedem:* locis maritimis occurrit super *Acer* campestre speciatim in ascensu montis *Reuss* dicti ad *Saorgio* positi BALB: de crep. p. 7. sub *Lichene*. Ad truncos Fagi et *Quercus* in sylvis montanis BIROLI fl:

acon: II. p. 191. sub *Parmelia*. *Sardin*: ad truncos arborum cum var: *calicari* MORIS st: sard: III. p. 21. sub *Ramalina*). Differt a priori statura generatim majore, thallo *glauco lævigato* nec *rugoso*, laciniis seu ramis sursum incrassatis *fastigiatis*, apotheciis *terminalibus albidis*. In var: *calicari* (*Lichen calicaris* Auctor: vulgo non L.) rami sunt lineares attenuati sub-cylindracei.

\* 14. *P. scopulorum* = Ach: meth: p. 261. = Spr: syst: IV. 279. = Sub *Ramalina* Ach: lich: univ: p. 604. tab: XIII. f. 6. Sub *Lichene* Retz: aliique. *L. calicaris* L. Fl: dan: t. 959. f. 2. (*Eur*: ad rupes. *Pedem*: in sylvis vallis *Segusinae* arboribus insidet ALL: n. 2562. Re fl: segus: p. 89. ambo sub *L. calicari*. In valle di *Canobbio* ad truncum Fagi BIROLI fl: acon: II. p. 192.). Thallus plano-compressus pallidus lævissimus ramis linearibus elongatis attenuatis sub-divisis, apothecia sparsa breviter pedicellata demum convexiuscula fuscescentia.

\* 15. *P. farinacea* = Ach: meth: p. 263. = Spr: syst: IV. 279. Sub *Ramalina* Ach: lich: univ: p. 606. Sub *Lichene* L. aliique. = Ach: in nov: act: Stockh: vol. XVIII. p. 257. t. 11. f. 1. Dill: musc: t. 23. f. 63. (*Eur*: ad arbores. *Pedem*: præsertim supra *Fraxinum* excelsiorem Re app: I. p. 45. et fl: tor: II. p. 252. sub *Ramalina*. In truncis arborum locis montanis non frequens BIROLI fl: acon: II. p. 192. sub *Parmelia*). A priori statim dignoscitur præsertim thallo *tereti-compresso* sorediis copiosis *fariniferis* adperso, apotheciis *carneis*.

\* 16. *P. pollinaria* = Ach: meth: p. 264. = Spr:

syst: IV. 279. Sub *Ramalina* Ach: lich: univ: p. 608. = Sub *Lichene* Ach: in nov: act: Stockh: vol. XVIII. p. 263. t. 11. f. 2. Dill: musc: t. 21. f. 55. A F H pro var:  $\alpha$  *elatiore* et f. 56. A pro var:  $\beta$  *humili* (*Eur:* ad arbores et saxa. *Pedem:* in monte *Musinè* et in alpibus *di Monastero* in valle *Lancei* RE app: II. p. 213. et fl: tor: II. p. 252. sub *Ramalina*). Differt a præcedenti, cui summopere indole sorediorum affinis, thalli laciniis *lterioribus* planis sub-membranaceis, apotheciis *sub-terminalibus* demum dilatatis *maximis marginatis*.

\* 17. *P. Prunastri* = Ach: meth: p. 257. = Spr: syst: IV. 280. = Sub *Evernia* Ach: lich: univ: p. 442. tab: X. f. 1. Sub *Lichene* L. aliiq. Dill: musc: t. 21. f. 54. 55. (Ad arbores *Eur:* et *Amer:* *Pedem:* vulgaris in corticibus arborum emortuarum ALL: n. 2564. Supra Prunum spinosam aliasque arbores RE fl: segus: p. 88. ambo sub *Lichene*. Ad truncos arborum in alpibus sæpe occurrit BIROLI fl: acon: II. p. 191. sub *Parmelia*. *Sardin:* ad truncos ramosque arborum MORIS st: sard: III. p. 19. sub *Evernia*. *Sabaud:* BILLET in litt: sub *Physcia*). Thallus mollis albicans laciniis multifidis planis lineari-attenuatis rugoso-lacunosus subtus canaliculatis albidioribus; apothecia raro occurrunt, quando adsunt aggregata marginalia demum pedicellata concava, disco sub-fusco, margine thallode tenui sub-integro. Variat multimode magnitudine, directione et divisione laciniarum.

\* 18. *P. divaricata* = Ach: meth: p. 269. = Spr: syst: IV. 280. = Sub *Evernia* Ach: lich: univ: p. 441. tab: X. f. 2. Sub *Lichene* L. aliiq. Dill: musc: t. 12.



f. 5. (Ad arbores maxime coniferas *Eur.*, *Afr.* austr: *Pedem.* in alpibus et montibus *Valdensium* ALL: n. 2592. sub *Lichene*. *Sabaud.* BILLET in litt: sub *Usnea flaccida*. *Sardin.* ad arbores in sylvis MORIS st: sard: III. p. 19. sub *Evernia*). Parum differt a priori thallo *ochroleuco*, laciniis magis elongatis *divaricatis pendulis*, apotheciorum disco *saturate rubro* margine thallode *sub-granulato* et *inciso*.

\* 19. *P. vulpina* = Ach: meth: p. 268. = Spr: syst: IV. 280. Sub *Evernia* Ach: lich: univ: p. 443. Sub *Lichene* L. alique. = Dill: musc: t. 13. f. 16. (*Eur.* ad ligna vetusta. *Pedem.* in sylvis montanis *Valdensium* ALL: n. 2596. Supra arborum truncos ascendendo jugum *dell'Assiette* aliisque locis alpestribus RE fl: segus: p. 89. ambo sub *Lichene*. In truncis arborum in alpibus BIROLI fl: acon: II. p. 193. *Sabaud.* BILLET in litt: sub *Cornicularia*). Thallus virescenti-citrinus angulosus ramosissimus ramis rigidis lacunosus flexuosis, apotheciorum discus fuscescens margine thallode sub-nullo.

\* 20. *P. flavicans* = Ach: meth: p. 268. = Spr: syst: IV. 280. = Sub *Borrera* Ach: lich: univ: p. 504. (*Eur.*, *Ind.* occid:, *Afr.* austr: *Sardin.* ad truncos ramosque arborum in montibus MORIS st: sard: III. p. 18. sub *Borrera*. *Sabaud.* BILLET in litt: sub *Physcia*). Differt a priori thallo *flavo*, ramis *teretiuseculis diffuso-complicatis*, apotheciorum disco plano *aurantiaco* margine thallode *integro nudo*.

\* 21. *P. chrysophthalma* = Ach: meth: p. 267. = Spr: syst: IV. 280. Sub *Borrera* Ach: lich: univ: p. 502. Sub *Lichene* L. alique. = Dill: musc: t. 13.

f. 17: (*Eur:* ad arbores. *Pedem:* in ramis Pruni spinosæ et Ligustri vulgaris locis calidioribus *di Con-dove* loco dicto *la Roccea* BALB: misc: p. 48. In sterilibus pascuis *della Rivera* RE fl: segus: p. 89. ambo sub *Lichene*. Uberrime prope *Caselette* ad radices *M. Musinè* et in sterilibus *della Praglia di Pianezza* et prope *la Mandria* supra ramos Pruni spinosæ RE fl: tor: II. p. 242. sub *Borrera*). Thallus decumbens pallide flavus laciniis plano-convexiusculis linearibus pinnatifido-ramosis apice fibrilloso-ciliatis, apothecia sub-terminalia magna pedicellata planiuscula disco saturatius flavo margine thallode ciliato. Stirps pulcherrima.

✱ 22. *P. islandica* = Spr: syst: IV. 280. = Sub *Cetraria* Ach: lich: univ: p. 512. Sub *Lichene* L. aliique. = Dill: musc: t. 28. f. 111. (*Ad terram Eur:*, *Amer:* bor: *Pedem:* frequentissima ad terram et lapides in sylvis montanis alpinis et subalpinis ALL: n. 2557. Abunde occurrit in sylvis *di Frassinere* in regione dicta *le Combe* RE fl: segus: p. 88. ambo sub *Lichene*. In pascuis alpinis montanis et collinis nec desideratur in ericetis *Ticini* BIROLI fl: acon: II. p. 196. sub *Cetraria*. *Sabaud:* BILLET in litt: sub *Cornicularia aculeata* et *Physcia islandica*). Thallus expansus sub-cartilagineus olivaceo-badius basi albidus sanguinolentus e laciniis pluribus confertis erectis complicatis dentato-ciliatis compositus, apothecia magna adpressa plana concoloria margine thallode elevato integro; planta officinalis. Huc pertinet var: SPR: *Lichen aculeatus* EHRH: (*Cornicularia* Ach: lich: univ: p. 612.) penes nos cum typo promiscue enascens.

(BELL: app: p. 69. RE fl: segus: p. 90. BIROLI fl: acon: II. p. 198.), differens statura undique minori, laciniis valde tenuioribus magis complicatis in cæspitem densum congestis; crescit etiam in *Sardin*: ad saxa in apricis (MORIS st: sard: III. p. 19. sub *Cor-nicularia*).

\* 23. *P. cucullata* = Spr: syst: IV. 281. = Sub *Cetraria* Ach: lich: univ: p. 511. = Sub *Lichene* Sm: act: soc: Linn: Lond: vol. I. p. 84. t. 4. f. 7. aliique (*Eur*: alpibus. *Pedem*: inter *Vaccinia* circa lacum *M. Cenisii* BELL: app: p. 65. RE fl: segus: p. 90. ambo sub *Lichene*. *Sabaud*: BILLET in litt: sub *Physcia*). Vix distinguitur a priori thallo pallescente basi *rufo*, laciniis *tubulosis* margine *undulato-crispis* laceris fertilibus *sub-cucullatis*, apotheciis *carneo-fuscescentibus*.

\* 24. *P. nivalis* = Spr: syst: IV. 281. = Sub *Cetraria* Ach: lich: univ: p. 510. Sub *Lichene* L. aliique = Dill: musc: t. 21. f. 56. A (*Eur*: alpibus. *Pedem*: frequens in summis rupibus Alpium ALL: n. 2558. RE fl: segus: p. 88. ambo sub *Lichene*. BIROLI fl: acon: II. p. 196. sub *Cetraria*. *Sabaud*: BILLET in litt: sub *Physcia*). A duabus præcedentibus differt thallo *sub-membranaceo albescente* basi *flavicante*, laciniis *dilatatis multifido-laceris*, apotheciis *carneis*, margine thallode *crenulato*.

\* 25. *P. furfuracea* = Ach: meth: p. 254. = Spr: syst: IV. 281. = Sub *Borrera* Ach: lich: univ: p. 500. tab: IX. f. 3. Sub *Lichene* L. aliique. Dill: musc: t. 21. f. 52. (*Eur*: ad terram rupes et arbores. *Pedem*: in alpium sylvis ad arbores ALL: n. 2560. Co-



piose supra *il Bosco nero* RE fl: segus: p. 88. ambo sub *Lichene*. Ad truncos arborum præsertim Fagi frequens ubi etiam var: *ceratea* BIROLI fl: acon: II. p. 190. Habeo a BELLARD: lectam supra truncos emortuos Castanearum in vineis *di Masino. Sabaud: BILLET* in litt: sub *Physcia*). Thallus decumbens valde expansus cinereo-pulverulentus subtus canaliculatus violaceo-niger laciniis diffusis lineari-attenuatis ramosis, apothecia rara marginalia cyathiformia disco rufo margine thallode tenui inflexo. In var:  $\gamma$  *ceratea* laciniæ sunt magis angustatæ sub-erectæ acuminatæ.

\* 26. *P. fascicularis* = Ach: meth: p. 239. = Spr: syst: IV. 281. Sub *Collema* Ach: lich: univ: p. 639. Sub *Lichene* L. alii que = Dill: musc: t. 19. f. 27. A (*Eur: in saxis et montibus. Pedem: in montibus supra Giaveno ALL: auct: n. 2566. \* p. 52. In locis frigidis supra saxa nella Comba d'Ambin RE fl: segus: p. 90. ambo sub Lichene. Prope Caselle et in sylvis della Mandria RE fl: tor: II. p. 253. sub Collema. Sabaud: BILLET* in litt: sub *Collema symphoreo*). Thallus sub-orbiculatus olivaceo-sub-gelatinosus imbricatus a plicis elevatis gyroso-flexuosis marginibus integris compositus lobis in ambitu thalli depressis inciso-crenatis, apothecia in margine plicarum fasciculata sub-turbinata fusca. Huc pertinet sec: SPR: *P. myriococca* Ach: act: Stockh: vol. XXII. p. 159. t. 3. f. 2. eadem ac *Collema symphoreum* DC., quæ reapse non videtur differre nisi thalli lobis in ambitu integris, apotheciis confertioribus ac numerosioribus; invenitur etiam in *Sardin: inter fissuras rupium mone* MORIS st: sard: III. p. 18. sub *Collema*.

## II. Thallo foliaceo decumbente.

*a Apotheciis nigris.*

\* 27. *P. stygia* = Ach: lich: univ: p. 471. = Spr: syst: IV. 282. excl: syn: *Lichenis lanati*. Sub *Lichene* L. aliiq. = Hoffm: pl: lich: t. 25. f. 2. (*Eur: alpibus. Pedem: in saxosis vallis Augustanæ* BALB: misc: p. 47. sub *Lichene*. Super saxa in umbrosis Alpium BIROLI fl: acon: II. p. 184. *Sabaud: BILLET in litt: sub Imbricaria*). Thallus orbicularis nigro-piceo-nitidus a laciniis imbricatis plicato-rugosus superne interdum verrucis albis adpersus subtus ater scabridus laciniis multifido - palmatis convexis, apothecia fusco-atra margine crenata.

\* 28. *P. lanata* = Nob: = Sub *Cornicularia* Ach: lich: univ: p. 615. Sub *Lichene* L. aliiq. Sub *Parmelia stygia* Spr: syst: IV. 282. *Lichen laneus, normoericus, reticulatus et pubescens* quorund: = Dill: musc. t. 13. f. 9. (*Eur: alpibus. Pedem: rupes alpinas frigidas inhabitat* ALL: n. 1594. sub *Lichene*). Differt a priori, cum qua confusa a SPR:, thallo in cæspitem *pulvinatum et complicatum* congesto subtus *cinereo-fuscescente*, ramis breviusculis apice *furcatis*, apotheciis *majoribus sub-integris*. Stirps polymorpha, ideo dubia.

\* 29. *P. ciliaris* = Ach: meth: p. 255. = *P. cyclozelis* Spr: syst: IV. 282. ex Ach: male. *Borrera ciliaris* Ach: lich: univ. p. 496. *Lichen ciliaris* L. aliiq. = Vaill: par: t. 20. f. 4. Dill: musc: t. 20.

f. 45. D pro var:  $\beta$  *agriopa* et f. 45. B C pro var:  $\gamma$  *melanosticta* (*Eur*: ad arbores et saxa. *Pedem*: vulgarissima in sylvis montanis ad arbores ALL: n. 2556. RE fl: segus: p. 88. ambo sub *Lichene*. In *M. Musiné* RE fl: tor: II. p. 241. sub *Borrera*. Ad rupes summarum Alpium vulgaris BIROLI fl: acon: II. p. 190. *Sardin*: in sylvis montanis vulgarissima MORIS st: sard: III. p. 18. sub *Borrera*. *Sabaud*: BILLET in litt: sub *Physcia*). Thallus orbicularis virescenti-glaucus subtus albicans canaliculatus laciniis ramosis linearibus apice ciliatis, apothecia terminalia pedicellata disco concavo demum plano nigro. Variat multimode. *P. cycloselis* (*Lichen orbicularis* NECK:) quam cl: SPR: confundit cum *ciliari*, quamque possideo ex BELLARD: sine loci indicatione, toto coelo habitu etiam differt. Cons: ACH: lich: univ: p. 482

\* 30. *P. virella* = Ach: meth: p. 201. = Sub *Lecanora* Ach: lich: univ: p. 414. = Sub *Lichene* Ach: lich: suec: Sub *Parmelia cycloselide* Spr: syst: IV. 282. (In saxis *Sueciæ*. *Pedem*: in sylvis della *Mandria* supra saxa RE app: II. p. 212. et fl: tor: II. p. 237. sub *Lecanora*). Differt a priori thallo *cinereo-viridi*, laciniis *undulatis* irregularibus nec ciliatis demum *pulverulentis*, apotheciis *sessilibus*. Huc pertinere videtur *Imbricaria ulothrix* quam habeo a BILLET ex *Sabaud*:

$\beta$  *Apotheciis cæcio-pruinosis.*

\* 31. *P. stellaris* = Spr: syst: IV. 283. excl: syn: Scop: et Hagen: = *P. stellaris* et *aipolia* Ach: lich:



univ: p. 476. 477. *Lichen stellaris* L. et *aipolia* Ach: = Hoffm: enum: lich: t. 13. f. 1. 2. pro *L. stellari*. Dill: musc: t. 24. f. 70. pro *L. aipolia* (*Eur*: ad arbores. *Pedem*: frequenter ramos arborum tegit in sylvis ALL: n. 2555. RE fl: segus: p. 88. ambo sub *Lichene stellari*. RE fl: tor: II. p. 240. sub *P. stellari* et *aipolia*. BIROLI fl: acon: II. p. 185. 186. sub iisdem. *Sardin*: ad truncos arborum *Arizzo* MORIS st: sard: III. p. 21. pro *P. stellari*. *Sabaud*: BILLET in litt: sub *Imbricaria*). Thallus stellatus ex albedo cinerascenti et cæsiò subtus albidus fibrillis cinereis (fusco-nigris in *aipolia*) laciniis sub-linearibus multifidis lobatisve, apothecia nigra cæsiò-pruinosa margine demum crenulata. Variat sub diversis ætatis periodis, nec ulli constantes characteres observantur ad distinguendam *P. aipoliam* a *stellari*. Ic: DILL: ab ALL: citata pertinet ad *aipoliam* monente Ach:

\* 32. *P. Hageni* = Ach: meth: p. 162. = Sub *Lecanora* Ach: lich: univ: p. 367. Sub *Lichene* Ach: lich: succ: = *Lichen cærulescens* Hagen: hist: lich: p. 59. t. 1. f. 5. *Parmeliæ stellaris* var: Spr: syst: IV. 283. (*Eur*: in cortice arborum. *Pedem*: in tenero cortice arborum BALB: fl: taur: p. 186. sub *Lichene*. RE fl: tor: II. p. 233. sub *Lecanora*. BIROLI fl: acon: II. p. 181. sub *Parmelia*). Differt a priori thallo *chartilagineo-membranaceo* vix lacinulato, apotheciis minutis lentiformibus margine integris.

\* 33. *P. tenella* = Ach: meth: p. 250. = Sub *Borrera* Ach: lich: univ: p. 498. *Parmelia stellaris* var: Spr: syst: IV. 283. *Lichen tenellus* Web: aliique. *L. hispidus*, *leptaleus*, *semipinnatus* quorund: = Vaill:

par: t. 20. f. 5. pro typo. Dill: musc: t. 20. f. 46. pro var: *leptalea* (*Eur:* ad arbores et sepes. *Pedem:* in sylvis montanis passim ALL: n. 2554. Copiose ad *Condove* regione dicta *la Roccea* RE fl: segus: p. 89. ambo sub *Lichene*. Ad arborum truncos et ramos frequens RE fl: tor: II. p. 241. sub *Borrera*. BIROLI fl: acon: II. p. 190. sub *Parmelia* sine loci indicatione. *Sabaud:* BILLET in litt: sub *Physcia*). Differt a priori thallo tantum *sub-stellato* utrinque *concolori*, laciniis *fornicatis ciliatis*, apotheciis *planis* margine thallode *integro*.

\* 34. *P. cæsia* = Ach: lich: univ: p. 479. = Spr: syst: IV. 283. = Sub *Lichene* Hoffm: pl: lich: t. 8. f. 1. (*Eur:* in saxis et lignis. *Pedem:* habeo ex BEL-LARD: lectam ad cortices arborum et præsertim *Castaneæ* in prov: *Segusiana* et *Monregalensi* RE app: I. p. 45.). Valde quoque *P. stellari* affinis, a qua distinguitur thallo *pulverulento*, fibrillis subtus *cinereo-nigris*, laciniis prorsus *linearibus*, apotheciis *nigris* margine *sub-integro*.

\* 35. *P. pulverulenta* = Ach: lich: univ: p. 473. = Spr: syst: IV. 283. Sub *Lichene* Schreb: aliique = Dill: musc: t. 24. f. 71. (*Eur:* ad cortices arborum. *Pedem:* in valle *August: Prætor:* BALB: misc: p. 47. sub *Lichene* et el: p. 6. sub *Parmelia*. Cum *stellari* et *aipolia* promiscue sæpe ad truncos *Mori albæ* BIROLI fl: acon: II. p. 186. *Sardin:* ad truncos arborum MORIS st: sard: III. p. 21. *Sabaud:* BILLET in litt: sub *Imbricaria*). A tribus præcedentibus differt thallo supra *albo-cæsiopruinoso* subtus *atro-tomentoso-hispido*, laciniis *lterioribus undulatis pulverulentis*, apotheciis

*cæsiis* margine *flexuoso-crenatis*. Huc conjungit SPR: *P. venustam* Ach: l. c. p. 475. inter plantas sardoas a cl: MORISIO enumeratam (l. c.), quæ reapse recedere tantum videtur thallo superne *sub-nudo* nec pruinoso, apotheciorum disco *sub-immerso fimbriato-folioloso*.

36. *P. pityrea* = Ach: lich: univ: p. 483. Spr: syst: IV. 283. (*Eur*: ad rupes et cortices arborum. *Sardin*: similibus locis MORIS st: sard: IV. p. 21.). Thallus cinereo-pulverulentus subtus albus fibrillis nigris laciniis interioribus plicatis exterioribus planis rotundatis, apothecia concava nigro-fusca pruinosa integra.

γ *Apotheciis fuscis badiis.*

1. Thallo membranaceo-cartilagineo, humecto  
haud mutato.

\* 37. *P. glauca* = Spr: syst: IV. 283. = Sub *Cetraria* Ach: lich: univ: p. 509. Sub *Lichene* L. alique = Dill: musc: t. 25. f. 96. pro typo et t. 22. f. 58. pro var: β *Lichen fallax* (*Eur*: ad saxa et truncos arborum. *Pedem*: in sylvis etiam montanis non infrequens ALL: n. 2566. RE fl: segus: p. 88. ambo sub *Lichene*. In truncis arborum et saxis locis editioribus umbrosisque RE fl: tor: II. p. 243. BIROLI fl: acon: II. p. 197. ambo sub *Cetraria*. *Sabaud*: supra arbores prope *Annecy* RE app: II. p. 212. pro var: β. *Sardin*: ad truncos arborum et ad rupes in montanis MORIS st: sard: III. p. 18. pro var: β. *Mauriana* BIL-



LET in litt: sub *Physcia*). Thallus expansus sinuato-lobatus glaucus subtus niger lobis inciso-laceris complicatis, apothecia sub-terminalia concaviuscula obtuse fusca margine thallode inflexo rugoso-crenulato. *Lichen fallax* WEB: non differt nisi statura generatim majori, et thallo. sæpius utrinque albo.

\* 38. *P. juniperina* = Spr: syst: IV. 283. = Sub *Cetraria* Ach: lich: univ: p. 506. tab: X. f. 4. Sub *Lichene* L. aliique = Fl: dan: t. 1004. Hoffm: pl: lich: t. 7. f. 2. pro typo et f. 1. pro var:  $\beta$  *Lichen pinastri* (*Eur:* ad truncos arborum præsertim coniferarum. *Pedem:* communis in sylvis alpinis di *Mompintero* RE fl: segus: p. 90. sub *Lichene pinastri*. In truncis et ramis in sylvis *della Mandria* pro typo, in collibus *Taurinens:* supra Prunum spinosam pro var:  $\beta$ . RE fl: tor: II. p. 242. 243. sub *Cetraria*. BALB: de crep: p. 6. In rupibus et truncis Juniperi pro typo, ad truncos Laricis et Fagi pro var:  $\beta$ . BIROLI fl: acon: II. p. 197. sub ead: *Sabaud:* BILLET in litt: sub *Physcia juniperina* et *pinastri*). Thallus utrinque flavus lobatus lobis crispis eroso-crenatis, apothecia fusca concaviuscula demum irregularia planiuscula inciso-lobata margine thallode supra discum elevato crenulato. *Lichen pinastri* SCOP: est sola var: thalli lobis depressis rotundato-crenatis margine pulverulentis.

\* 39. *P. caperata* = Ach: lich: univ: p. 457. = Spr: syst: IV. 284. Sub *Lichene* L. aliique = Dill: musc: t. 25. f. 96. (Ad saxa et arborum truncos *Eur:*, *Amer:* bor: *Pedem:* locis montanis et umbrosis ad arbores et rupes ALL: n. 2565. Valde communis a *Condove* in regione *della Roccea* RE fl: segus: p. 88.

ambo sub *Lichene*. Supra saxa et arbores RE fl: tor: II. p. 239. BIROLI fl: acon: II. p. 187. *Sardin*: ad truncos arborum et ad saxa frequens MORIS st: sard: III. p. 20. *Sabaud*: BILLET in litt: sub *Imbricaria*). Thallus valde expansus supra pallide flavo-virescens demum granulatus subtus atro-hispidus lobis latiusculis rotundatis plicatis, apothecia centralia disco concavo rufescenti margine incurvo sub-pulverulento rugoso - crenato.

\* 40. *P. tiliacea* = Ach: lichen: univ: p. 460. = Spr: syst: IV. 284. *Lichen tiliaceus*, *quercinus* et *quercifolius* quorund: = Hoffm: enum: lich: p. 96. t. 16. f. 2. (Ad truncos arborum *Eur*: passim. *Pedem*: supra cortices arborum vetustarum inter *Borgomasino* et *Cosanum* BELLARD: app: p. 66. sub *Lichene*. Supra arborum truncos prope *Venariam* RE fl: tor: II. p. 239. Ad truncos Fagi vulgaris BIROLI fl: acon: II. p. 187. *Sardin*: ad truncos arborum in sylvis MORIS st: sard: III. p. 21.). Vix differt a priori thallo supra albo-virescente sub-pruinoso nec granulato, apotheciis margine integro. Huc pertinet sec: SPR: *P. scortea* Ach: , quam habeo ex *Sabaud*: a BILLET sub *Imbricaria scortea* et *quercina*.

41. *P. plumbea* = Ach: lichen: univ: p. 466. (*Eur*: *Afr*: austr: *Sardin*: ad arbores et saxa MORIS st: sard: III. p. 21.). Thallus stellatus orbicularis lividi-plumbeus laciniis rotundatis inciso - crenatis, apothecia rufa margine integro.

\*? 42. *P. pannosa* = Ach: lichen: univ: p. 465. = Spr: syst: IV. 285. = Sub *Lichene* Sw: (*Ind*: occid: *Pedem*: occurrit supra il *Colle della Torre* in prov:

*Segus*: RE app: II. p. 212. ). Fide cl: RE numero hanc stirpem inter indigenas, etsi nullus Auctor, uti sciam, europæam ipsam dixerit. Ceterum parum a priori differt thalli colore *cinereo-fusco* subtus *nigrotomentoso*, laciniis *connatis* angustioribus.

\* 43. *P. saxatilis* = Ach: lichen: univ: p. 469. = Spr: syst: IV. 285. Sub *Lichene* L. aliiue = Dill: musc: t. 24. f. 83. (*Eur*: ad arbores et saxa. *Pedem*: passim in corticibus arborum ALL: n. 2549. In montanis supra *il Bosco nero* RE fl: *segus*: p. 88. ambo sub *Lichene*. Supra saxa et ad arborum truncos RE fl: tor: II. p. 240. BIROLI fl: acon: II. p. 185. *Sardin*: iisdem locis MORIS st: *sard*: III. p. 21. *Sabaud*: BILLET in litt: sub *Imbricaria retiruga*). Thallus late expansus cinereo - glaucescens lacunoso - reticulatus subtus nigro - fibrillosus laciniis planis sinuato-lobatis apice sæpius retusis, apothecia per ætatem magna badia margine crenulato.

\* 44. *P. fahlunensis* = Ach: lichen: univ: p. 470. = Spr: syst: IV. 285. Sub *Lichene* L. aliiue = Dill: musc: t. 24. f. 81. (*Eur*: ad rupes alpinas. *Pedem*: in *M. Cenisio* locis rupestribus elatioribus BELLARD: app: p. 470. RE fl: *segus*: p. 90. ambo sub *Lichene*). Thallus orbiculato-sub-stellatus lævigatus piceus laciniis planiusculis sinuato-multifidis margine lacero - granulatis, apothecia olivaceo-fusca margine granulato.

\* 45. *P. aquila* = Ach: meth: 201. = Spr: l. c. = Dill: musc: t. 24. f. 69. (Supra saxa et in montibus *Sabaud*: BILLET in litt: sub *Imbricaria*). Thallus sub-orbicularis chartilagineo-membranaceus umbrinus

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laciniis multi-partitis sub-linearibus convexis imbricatis ambitu crenatis, apothecia glabra concoloria vel fusconigra margine dilutiori crenulato.

\* 46. *P. olivacea* = Ach: lichen: univ: p. 462. = Spr: syst: IV. 285. Sub *Lichene* L. alique = Dill: musc: t. 24. f. 77. 78. (*Eur:* ad arbores et saxa. *Pedem:* in rupibus et corticibus arborum ALL: n. 2251. sub *Lichene olivaceo* et 2250. sub *L. pullo*. Supra muros et arbores RE fl: segus: p. 88. sub *L. olivaceo* et fl: tor: II. p. 239. sub *Parmelia*. In montibus vallis *Sessitis* BIROLI fl: acon: II. p. 187. sub ead: *Sardin:* ad rupes et ad truncos arborum MORIS st: sard: II. p. 21. *Sabaud:* BILLET in litt: sub *Imbricaria*). Thallus orbicularis olivaceo-fuscus nitidus elevato-punctatus subtus pallidior sub-fibrillosus lobis radiantibus planis rotundatis crenatis, apothecia sub-concoloria margine crenulato. *Lichen pullus* ALL: ex SCHREB: est sola var:

\* 47. *P. encausta* = Ach: lichen: univ: p. 489. = Spr: syst: IV. 286. = Sub *Lichene* Sm: act: soc: Linn: lond: V. 1. t. 24. f. 6. *Lichen intestiniformis* Dill: alique (Ad rupes et alpes *Eur:* passim. *Pedem:* in *M. Cenisio* RE fl: segus: p. 90. sub *Lichene intestiniformi*. Ad rupes et muros locis alpinis vulgaris BIROLI fl: acon: II. p. 184. *Sabaud:* in rupibus alpinis in summitate montis *Montanvert* prope *Chamony* BEL-LARD: app: p. 65. sub *Lichene intestiniformi*. *Mauriana* BILLET in litt: sub *Imbricaria*. *Sardin:* ad rupes MORIS st: sard: III. p. 21.). Thallus coriaceus albo-virescens demum nigricans laciniis linearibus furcato-multifidis

nigro - punctatis , apothecia fusca margine pallidiora sub-crenulata.

\* 48. *P. leucophylla* = Nob: = Sub *Imbricaria* Billet in litt: (*Sabaud:* BILLET). « Thallo exterius » subtusque pallide albido non nitente , laciniis li- » nearibus intestiniformibus 2-3-fidis minimis pun- » ctatis convexis, apotheciis badiis nigrescentibus al- » bido - marginatis sæpius numerosis agglomeratis. » BILLET. Ex speciminibus a cl: Auctore humaniter missis et in *Mauriana* prope *N. D. de Villars* lectis, plane mihi constat hanc stirpem, etsi priori affinem, satis tamen ab eadem differre characteribus allatis ut pro nova admittatur.

\* 49. *P. centrifuga* = Ach: lichen: univ: p. 486. = Spr: syst: IV. 286. Sub *Lichene* L. sp: 1609. non All: = Ic: ? (Ad montes et rupes *Sueciæ*. Super saxa in collibus et montibus BIROLI fl: acon: II. p. 185.). Differt a duabus præcedentibus, quibus affinis, thallo albo - virescente , laciniis concretis convexis obtusiusculis, apotheciis margine sub-integro.

\* 50. *P. conspersa* = Ach: lichen: univ: p. 486. = Spr: syst: IV. 286. Sub *Lichene* Ehrh: *Lichen centrifugus* All: et Auctor: vulg: non L. = Dill: musc: t. 24. f. 75. (*Eur:* passim ad rupes. *Pedem:* in rupibus locis alpinis et subalpinis ALL: n. 2548. sub *Lichene centrifugo*. Ad saxa et lapides in sylvis della *Mandria* RE fl: tor: II. p. 241. Cum priori BIROLI fl: acon: II. p. 185. *Sardin:* ad rupes saxaque in montanis frequens MORIS st: sard: III. p. 20. *Sabaud:* BILLET in litt: sub *Imbricaria*). Perperam ab ALL: aliisque nonnullis confusa cum *Lichene centrifugo*, a

quo distinguitur colore thalli *glauco-virescente punctis nigris consperso*, laciniis *planiusculis sinuato-lobatis rotundato-crenatis*, apotheciis *badiis*.

\* 51. *P. ambigua* = Ach: meth: 207. = Spr: l. c. = Sub *Imbricaria* Hoffm: lich: t. 40. f. 2. 4. alique (Ad ligna semi-putrida et rupes *Sabaud: BILLET* in litt: sub *Imbricaria*). Thallus stellatus pallide virens lævigatus verrucis hemisphæricis concoloribus adpersus laciniis linearibus adpressis planis dichotomis sub-truncatis, apothecia minuta sub-centralia fusca margine integerrimo,

\* 52. *P. speciosa* = Ach: lichen: univ: p. 480. = Spr: syst: IV. 286. = Sub *Lichene* Wulf: apud Jacq: coll: III. p. 119. t. 7. (*Eur: passim, Amer: bor: Pedem: BALB: el: p. 6.*). Thallus stellatus glaber albocærulescens subtus lacteus nigricanti-fibrillosus laciniis planis brevibus sinuato-lobatis margine pulverulentis vel ciliatis, apothecia sub-fusca margine demum rugoso-crenato. Plantam non vidi.

## 2. Thallo sub-gelatinoso, humecto mutato.

\* 53. *P. saturnina* = Ach: meth: p. 221. = Spr: syst: IV. 287. Sub *Collema* Ach: lichen: univ: p. 644. Sub *Lichene* Dicks: alique = *Lichen discolor* Ach: in nov: act: Stockh: vol. XVI. p. 16. t. 3. f. 5. (*Eur: passim. Sabaud: in truncis arborum BELLARD: app: p. 65. sub Lichene et BILLET in litt: Sardin: ad saxa truncosque arborum frequens MORIS st: sard: III. p. 19. sub Collema*). Thallus atro-virens in rosulam dispositus subtus glauco-sub-tomentosus lobis sub-



rotundis undulatis integris, apothecia sub - elevata plana rufescentia integerrima.

\* 54. *P. nigrescens* = Ach: meth: p. 227. = Spr: syst: IV. 287. excl: syn: *P. flaccidæ*. Sub *Collema* Ach: lichen: univ: p. 646. Sub *Lichene* L. alii que. *Lichen vespertilio*, *papyraceus*, *Lactuca*, *cristatus* et *microcarpus* quorund: = Dill: musc: t. 19. f. 20. (Eur: passim. *Pedem*: nascitur abunde supra corticem arborum in prov: *Canapic*: BELLARD: app: p. 66. sub *Lichene*. Ad truncos arborum præsertim Fagi vulgaris BIROLI fl: acon: II. p. 189. *Sardin*: ad truncos arborum MORIS st: sard: III. p. 18. sub *Collema*. *Sabaud*: BILLET in litt: sub eod:). Thallus orbiculatus rugoso-plicatus sub-monophyllus atro-viridis inciso-lobatus lobis rotundatis integris, apothecia minuta conferta centralia rufo - fusca demum nigra margine integro. Huic prorsus simile *Collema exasperatum* Ach: saltem ex specim: quæ habeo a BELLARD: inter stirpes indigenas.

\* 55. *P. flaccida* = Ach: meth: p. 229. = *P. nigrescens* Spr: syst: IV. 287. *Collema flaccidum* Ach: lichen: univ: p. 647. = Sub *Lichene* Ach: in nov: aet: Stockh: vol. V. p. 16. t. 1. f. 4. (Inter muscos in *Suecia*, *Helvet*: *Pedem*: supra lapides prope *Venariam* Re app: II. p. 214. et fl: tor: II. p. 253. sub *Collema*). Vix differt a priori thallo *profunde* lobato, lobis *oblance ovatis flaccidis sub - divisis*, apotheciis *rarissimis sparsis*.

56. *P. tremelloides* = Ach: meth: p. 224. = Spr: syst: IV. 288. = Sub *Collema* Ach: lichen: univ: p.

655. (*Eur.*, *Ind*: occid:, *Afr*: austr: *Sardin*: ad truncos arborum in sylvis *Moris* st: sard: III. p. 19. sub *Collema*). Thallus tenerrimus sub-diaphanus plumbeo-olivaceus lobis oblongis rotundatis integris, apothecia sub-pedicillata plana rubra margine pallido integro.

\* 57. *P. furva* = Ach: meth: p. 230. = Spr: syst: IV. 288. Sub *Collema* Ach: lichen: univ: p. 650. = Sub *Lichene* Ach: in nov: act: Stockh: vol. XXII. p. 164. t. 3. f. 6. *Lichen granulatus* et *crispus* quorund: (*Eur*: ad saxa et arbores. *Pedem*: in truncis arborum prope *Venariam* et speciatim supra *Morum* albam *Re* app: II. p. 214. et fl: tor: II. p. 254. sub *Collema*. *Sabaud*: BILLET in litt: sub eod:). Thallus gelatinosus sub-rugosus complicatus utrinque granulatus lobis difformibus rotundatis undulato-crispis, apothecia sparsa plana nigro-fusca integerrima.

\* 58. *P. cheilea* = Ach: meth: p. 233. = Spr: syst: IV. 287. Sub *Collema* Ach: lichen: univ: p. 630. *Lichen cheileus* et *marginatus* quorund: = Schrad: journ: f. d. Bot: 1799. I. p. 6. t. 1. f. 2. (*Eur*: passim. *Pedem*: locis humidis ad muros saxa parietes et super humum cum varr: BIROLI fl: acon: II. p. 189.). Thallus sub-orbicularis imbricatus olivaceus lobis crassis minutis rotundatis crenulatis, apothecia planiuscula in medio thalli aggregata nigricantia margine concolori crenulato sub-evanescente. Variat multimode. Huc pertinere videtur *Collema melænum* Ach: lichen: univ: p. 636. penes nos repertum in *M. Cenisio* (*Re* app: I. p. 46.) ac differens tantum thalli lobis *lacero-laciniatis*, apotheciis *marginalibus*; eandem plantam

habuit BALB: (misc: bot: p. 47.) ex valle *Augustana* sub nomine *Lichenis jacobæifolii* SCHRANK: (*Collema melænum* var:  $\gamma$  ACH: l. c.).

♂ *Apotheciis rubris.*

1. Thallo membranaceo - cartilagineo, humecto  
haud mutato.

59. *P. glomulifera* = Ach: lichen: univ: p. 456. Spr: syst: IV. 288. (*Eur*: ad truncos arborum. *Sardin*: ad rupes monte *Santo Torralba*, ad corticem arborum *Arizzo* MORIS st: sard: III. p. 21.). Thallus valde expansus albo-pallescent pulvinulis sub-globosis atroviridibus adpersus subtus fuscescenti-tomentosus lobis amplis rotundato-sinuatis crenatis undulatis, apothecia margine rugosa. = 60. *P. perlata* = Ach: lichen: univ: p. 458. Spr: syst: IV. 288. (*Eur*: med: et austr: *Sardin*: ad saxa et ad arbores MORIS st: sard: III. p. 21.). Differt a priori, cui valde affinis, thallo supra *nudo* subtus *nigro* passim *sub-villoso*, lobis margine *plicatis integerrimis*. = 61. *P. corrugata* = Ach: lichen: univ: p. 462. Spr: syst: IV. 289. (*Eur*: passim. *Sardin*: ad truncos arborum in sylvis MORIS st: sard: III. p. 21.). Thallus olivaceo-fuscus elevato-punctatus subtus nigro-fuscus fibrillosus, apothecia ampla flexuosa margine crenulato; cetera fere ut in duabus præcedentibus.

\* 62. *P. lanuginosa* = Ach: lichen: univ: p. 465. = Spr: syst: IV. 289. = *Lichen lanuginosus* Hoffm: en: lich: p. 82. t. 10. f. 4. *Lichen membranaceus* Dicks: pl: crypt: br: II. p. 21. t. 6. (*Eur*: montibus.



*Pedem*: BALB: el: p. 6.). Thallus stellatus stramineus pulverulentus subtus nigro-cærulescens tomentosus laciniis imbricatis rotundatis irregulariter lobatis, apothecia rarissima minuta rufa margine pulverulento. Plantam non vidi.

\* 63. *P. physoides* = Ach: lichen: univ: p. 492. = Spr: syst: IV. 289. Sub *Lichene* L. alique = Dill: musc: t. 20. f. 49. pro typo et 49. C pro var:  $\beta$  *labrosa* (*Eur*: ad arbores ligna et saxa. *Pedem*: locis montanis ad cortices arborum ALL: n. 2553. Communis supra Pinos RE fl: segus: p. 88. ambo sub *Lichene*. Habeo etiam ex valle *Pisii* lectam a CUMINO. *Sardin*: ad saxa et truncos arborum MORIS st: sard: III. p. 21. *Sabaud*: BILLET in litt: sub *Imbricaria*). Thallus sub-stellatus albo-glauescens subtus nigro-fuscus laciniis linearibus imbricatis sinuato-multifidis apice inflatis, apothecia elevata concava demum dilatata planiuscula margine tenui integro inflexo. Var:  $\beta$  gaudet laciniis apice dilatatis verrucoso-pulverulentis.

2. Thallo sub-gelatinoso, humecto colorem mutante.

\* 64. *P. lacera* = Ach: meth: p. 225. = Spr: syst: IV. 290. Sub *Collema* Ach: lichen: univ: p. 657. *Tremella lichenoides* L. = Dill: musc: t. 19. f. 31. A B, f. 31. C pro var:  $\gamma$  *fimbriata*, f. 34. pro var:  $\delta$  *pulvinata* et f. 35. pro var:  $\epsilon$  *bolacina* (*Eur*: ad terram inter muscos. *Pedem*: inter muscos in collibus *Taurinens*: BALB: fl: taur: p. 188. sub *Lichene*. RE fl: tor: II. p. 254. sub *Collema*. Inter muscos ad terram

in collibus et montibus cum var:  $\delta$  *pulvinata* BIROLI fl: acon: II. p. 188. *Sardin:* in terra *Arizzo*, *S. Pietro* MORIS st: sard: III. p. 18. sub *Collema*). Thallus tenerrimus bruneo - cærulescens nudus vel pulvinatus (in var:  $\delta$ ) sub-diaphanus reticulato - sub - rugosus lobis lacero - laciniatis denticulato - ciliatis, apothecia sparsa concaviuscula margine elevato pallido. Huc spectat *Tremella lichenoides* L. ab ALL: enumerata n. 2600.

65. *P. palmata* = Spr: syst: IV. 291. ex Ach: meth: Sub *Collema* Ach: lichen: univ: p. 643. (*Eur:* inter muscos. *Sardin:* centrali ad rupes MORIS st: sard: III. p. 18. sub *Collema*). Differt præsertim a priori thalli lobis crassis confertis *palmato-incisis*, laciniis sub-linearibus *teretibus*, apotheciis *marginalibus*.

\* 66. *P. crispa* = Ach: meth: p. 234. = Spr: syst: IV. 291. *Collema pulposum* var:  $\beta$  *crispum* Ach: lichen: univ: p. 632. = Dill: musc: t. 19. f. 23. Sub *Lichene* L. aliique. *L. glyphicus* et *glauescens* quorund: (*Eur:* passim ad terram. *Pedem:* uberrime a *Chiavrie* ad *Salicis* vetustæ truncos et prope *Segus:* ad rupes *di S. Maria* RE fl: segus: p. 90. sub *Lichene*. Inter muscos in pascuis montanis BIROLI fl: acon: II. p. 189. Habeo a BELLARD: ex valle *Pisii* et alibi ex alpibus. *Sardin:* ad terram monte *Santo Pula* MORIS st: sard: III. p. 18. sub *Collema pulposo*). Thallus orbicularis olivaceus pulposus lobis centralibus erectiusculis granulatis periphæricis depressis majoribus obtusis crenulatis, apothecia sparsa concaviuscula margine granulato.

ε *Apotheciis flavis.*

1. Thallo membranaceo - cartilagineo, humecto  
haud mutato.

\* 67. *P. crythrella* = Ach: meth: p. 174. = Sub *Lecanora* Ach: lichen: univ: p. 401. = *Lichen flavo-virescens* Jacq: coll: II. t. 13. f. 4. 6. (*Eur*: saxis et rupibus. *Pedem*: supra saxa prope *Carassone* urbis *Montisregalis* suburbina RE app: II. p. 211.). Thallus rimosus areolato-sub-rugosus flavidus, apothecia sub-globosa rubro-aurantiaca nitida margine thallode elevato integro demum evanescente. Confusa a SPR: cum *P. parietina*.

\* 68. *P. salicina* = Ach: meth: p. 173. = Sub *Lecanora* Ach: lichen: univ: p. 400. Sub *Lichene* Schrad: aliique = Hoffm: pl: lich: t. 61. f. 3. 9. (*Eur*: ad corticem arborum. *Pedem*: similibus locis BALB: el: p. 6.). Differt a priori thallo luteo - cinerescente, apotheciis planis demum convexis, margine thallode crenulato demum integro. Pariter a SPR: confusa cum seq:

\* 69. *P. parietina* = Ach: lichen: univ: p. 463. = SPR: syst: IV. 291. excl: syn: duarum præcedentium. Sub *Lichene* L. aliique = Dill: musc: t. 24. f. 76. (*Eur*: ad arbores parietes et saxa. *Pedem*: passim in muris et rupibus ALL: n. 2552. RE fl: segus: p. 88. ambo sub *Lichene* et fl: tor: II. p. 240 sub *Parmelia*. BIROLI fl: acon: II. p. 186. *Sardin*: ad parietes rupes arboresque MORIS st: sard: III. p. 21.



*Sabaud*: BILLET in litt: sub *Imbricaria*). Thallus tenuis orbicularis fulvus subtus pallidior lobis radiantibus adpressis planis apice dilatatis crenatis, apothecia concoloria integra. Huc varias ACHARII spec: jungit MEYER: tamquam varr: , inter quas possideo 1.<sup>o</sup> *Lecanora cerinam* (ACH: lichen: univ: p. 390.) exhibentem thallum cinereum margine thallode per ætatem nigrescente; ipsam primus reperit RE in vetusto arboris trunco ad rupem *delle tre Penne* prope Segus: (RE fl: segus: p. 89. BALB: de crep: p. 8.), postmodum BIROLI in cortice arborum (fl: acon: II. p. 182.); eandem habeo ex *Sabaud*: a BILLET cum *Placodio candelario* (ead: planta) et cum seq:; 2.<sup>o</sup> *L. salicinam* (ACH: l. c. p. 400.) in cortice Salicis albæ non raram sec: BIROLI l. c. p. 181.

\* 70. *P. candelaria* = Ach: meth: p. 187. = Sub *Lecanora* Ach: lichen: univ: p. 416. *Parmelia parietina* var: Spr: syst: IV. 291. *Lichen candelarius* L. aliique = Dill: musc: t. 18. f. 18. B (*Eur*: cum priori. *Pedem*: frequens in muris et rupibus ALL: n. 2544. Supra arborum truncos vulgatissima RE fl: segus: p. 87. ambo sub *Lichene* et fl: tor: II. p. 237. sub *Lecanora*. BIROLI fl: acon: II. p. 183.). Thallus imbricatus flavo-viridis lobis confertissimis lacero-laciniatis margine pulverulaceo-granulatis, apothecia fere uti in præcedenti.

\* 71. *P. murorum* = Ach: meth: p. 195. = Spr: syst: IV. 291. *Lecanora murorum*, *cirrhochroa*, *callopisma*, *miniata*, *elegans*, *vitellina*  $\gamma$   $\delta$ , *citrina*  $\alpha$  Ach: sec: Spr: = Sub *Lichene* Hoffm: en: lich: p. 63. t. 9. f. 2. Dill: musc: t. 18. f. 18. pro typo. Hoffm:

pl: lich: t. 60. f. 1. pro *L. miniato*. Dill: musc: t. 24. f. 68. pro *L. elegante* (*Eur: in saxis et muris. Pedem: iisdem locis* BALB: el: p. 5. pro *Lecanora callopisma* et p. 6. pro *L. murorum*. RE app: II. p. 211. pro *L. citrina* et *vitellina*, et fl: tor: II. p. 235. pro iisd: et p. 238. pro *L. murorum*. BELLARD: app: p. 64. pro *L. elegante* sub *Lichene cinnabarino*. Abunde in al-pibus supra lapides et tecta RE fl: segus: p. 89. sub cod: *Sardin: ad rupes calcareas maritimas* MORIS st: sard: III. p. 19. pro *L. elegante*. *Sabaud: BILLET* in litt: sub *Patellaria vitellina*, *Placodio elegante* et *Pl: murorum*). Thallus plicato-rugosus sub-stellatus flavo-virescens sub-pulverulentus laciniis periphæricis ro-tundato-crenatis, apothecia centralia conferta aurea. Stirps valde polymorpha maxime per ætatem; cha-racteres a cl: Ach: tributi singulis speciebus supra enumeratis admodum leves nec satis constantes.

\* 72. *P. saxicola* = Ach: meth: p. 291. = Spr: syst: IV. 291. *Lecanora saxicola, baldensis, distracta, versicolor, chrysoleuca*, et *liparia* Ach: sec: Spr: *Lichen saxicola, muralis*, et *ochroleucus* quorund: = Jacq: coll: II. t. 13. f. 4. (*Eur: ad saxa et parietes. Pedem: in lapidibus schistosis de S. Lazar prope Se-gus: nec non ad muros et lapides prope Taurin: BALB: misc: alt: p. 37. sub Lichene. RE fl: tor: II. p. 237. sub Lecanora. In muris vetustis BIROLI fl: acon: II. p. 184. sub Parmelia. Habeo ex M. Cenisio a BEL-LARD: sub Lichene chrysoleuco. Eodem loco et in al-pibus di Monastero in valle Lancei RE app: I. p. 41. Sabaud: BILLET in litt: sub Placodio ochroleuco. Sar-din: ad muros rupesque frequens MORIS st: sard: III.*

p. 19. sub *Lecanora*). Colore thalli *pallide virescente*, et apotheciis *lutescenti-fulvis sub-ochraceis*, margine demum *crenulato* distinguitur præcipue a præcedenti. Ceterum et ipsa summopere varians.

\* 73. *P. crassa* = Ach: meth: p. 183. = Spr: syst: IV. 292. Sub *Lecanora* Ach: lichen: univ: p. 413. *Lichen crassus*, *cartilagineus*, et *cæspitosus* quorund: = Dill: musc: t. 24. f. 74. (Ad terram in *Eur*: montibus. *Pedem*: in *M. Cenisio* supra saxa RE fl: segus: p. 89. sub *Lichene crasso*. In montibus *Limoni* BELLARD: app: p. 63. sub *L. cæspitoso*. In rupibus montanis frequens BIROLI fl: acon: II. p. 182. *Sabaud*: BILLET in litt: sub *Squamaria*. *Sardin*: in terra vulgatissima MORIS st: sard: II. p. 19. sub *Lecanora*). Thallus imbricatus albo fuscoque virescens crassus lobis irregulariter inciso - crenatis rotundatis undulatis, apothecia sub - plana rufo - fulva margine thallode pallidiori tenui integro demum evanescente. Huc forsân referenda *Lecanora rubina* var: *Liparia*, quam cl: RE monet invenisse in sylvis della Mandria (app: II. p. 212. et fl: tor: II. p. 236.). Conf: SPR: syst: l. c. cum Ach: lichen: univ: p. 412.; plantam RE non possideo.

\* 74. *P. chlorophana* = Ach: meth: p. 44. = Sub *Lecanora* Ach: lichen: univ: p. 436. = Ic: ? (*Eur*: ad parietes rupium per alpes. *Pedem*: in *M. S. Bernardi* ex SCHLEICH: BALB: el: p. 5.). Thallo *flavissimo* ambitu *radioso-plicato*, apotheciis *concoloribus*, disco demum *convexo* marginem thallodem *excludente* a præcedentibus dignoscitur.



## III. Thallo squamuloso - lobulato.

\* 75. *P. alphophlaca* = Ach: meth: p. 41. = Spr: syst: IV. 293. Sub *Lecanora* Ach: lichen: univ: p. 428. = Ic: ? (Alpib: *Lappon:*, *Helvet: Pedem:* supra saxa loco dicto *la Torre del colle* RE app: I. p. 41.). Thallus crassus sub-imbricatus plicato-rugosus verrucosus sordide albus ambitu radioso-plicato lobulis turgidis inciso - crenatis, apothecia convexiuscula rufo-cæsia margine thallode flexuoso.

\* 76. *P. Caricæ* = Spr: syst: IV. 293. ex Cleud: = Sub *Lecanora* Ach: syn: p. 188. (Ad corticem *Ficus* in *Hispan:* Habeo ex PERRET lectam in cortice *Ficus* prope *Aix* in *Sabaud:*). Thallus exiguus incanus granuloso-pulverulentus, apothecia adpressa nigrescentia margine thallode crenulato.

\* 77. *P. circinata* = Ach: meth: p. 189. = Spr: syst: IV. 293. Sub *Lecanora* Ach: lichen: univ: p. 425. *Lichen circinatus* et *radiosus* quorund: = Hoffm: pl: lich: t. 59. f. 1. et t. 60. f. 3. (*Eur:* ad lapidès calcareos. *Pedem:* similibus locis BALB: el: p. 5. Secus *Sturam* et prope *Venariam* supra saxa RE fl: tor: II. p. 237. ambo sub *Lecanora*. Supra rupes dell' *Abbadia di Pinerolo* et in prov: *Monregalensi* RE app: I. p. 45. sub *Placodio radioso*. *Sabaud:* BILLET in litt: sub eod:). Thallus adpressus radioso-plicatus albo-cinascens ambitu lineari-laciniatus, apothecia confertissima disco plano fusco-nigro marginem thallodem subæquante.

\* 78. *P. fulgens* = Ach: meth: p. 192. = Spr:

syst: IV. 294. Sub *Lecanora* Ach: lichen: univ: p. 437. Sub *Lichene* Sw: alique. = *Lichen citrinus* Hedw: pl: crypt: II. t. 20. f. c. *L. friabilis* Vill: delph: t. 55. (*Eur*: ad terram et in rupibus. *Pedem*: in sterilibus secus vias inter *Cinzano* et *Moncucco* BALB: misc: Habeo ex *Albæ* collibus locis glareosis a BERTER: Circa lacum *M. Cenisii* supra scopulos gypseos decompositos BELLARD: app: p. 63. RE fl: segus: p. 89. ambo sub *Lichene friabili*. Sabaud: BILLET in litt: sub *Placodio*. Sardin: in terra *Calari*, *Domos novas*, *Isola di S. Pietro* MORIS st: sard: III. p. 19.). A priori distinguitur thallo *pallide flavescente*, laciniis *flexuosis planis*, apotheciorum disco *ruberrimo*, margine thallode tandem *flexuoso crenatoque*.

\* 79. *P. gelida* = Ach: meth: p. 188. = Spr: syst: IV. 294. = Sub *Lecanora* Ach: lichen: univ: p. 428. tab: VII. f. 7. Sub *Lichene* L. alique. Fl: dan: t. 470. f. 2. (*Ad rupes* in alpihus *Eur*: præsertim septentri: *Pedem*: frequens in summis alpihus BELLARD: app: p. 59. sub *Lichene*. In *M. Cenisio* RE fl: segus: p. 90. sub eod:). Thallus rimosus albo - cinarens verruca centrali elevata fusca radiatim rimosa instructus ambitu laciniato-lobatus, apothecia sparsa disco depresso rubro margine thallode crasso elevato integro. *Verruca centralis* distinguit præsertim hanc stirpem ab affinibus.

\* 80. *P. lepidora* = Ach: meth: p. 185. = Spr: syst: IV. 294. *Lecanora hypnorum* et *lepidora* Ach: lichen: univ: p. 417. 418. *Lichen hypnorum* quorund: = Fl: dan: t. 956. pro *Lecanora hypnorum*. Engl: bot: t. 740. pro *Lepidora* (*Eur*: inter muscos. *Pedem*:

iisdem locis BIROLI fl: acon: II. p. 182. *Sardin: iisdem locis MORIS st: sard: III. p. 19. sub Lecanora hypnorum*). Thallus imbricatus fusco - vel cinereo - virescens lobis minutis sub-granulatis, apotheciorum discus planus vel concaviusculus fuscus margine thallode crenulato sub-evanescente.

\* 81. *P. brunea* = Ach: meth: p. 186. = Spr: syst: IV. 294. Sub *Lecanora* Ach: lichen: univ: p. 419. Sub *Lichene* Sw: alique = Engl: bot: t. 1246. (*Eur: ad terram et in muscis. Pedem: locis similibus BIROLI fl: acon: II. p. 183. Habeo etiam ex valle Pisii a BELLARD: sub falso nomine Lichenis pulverulenti*). Vix distinguitur a priore thallo fusco olivaceo, apotheciis depressis confertissimis, margine thallode persistente.

\* 82. *P. Lagascae* = Spr: syst: IV. 294. = Sub *Lecanora* Ach: lichen: univ: p. 423. = *Lichen tartareus* Wulf: in Jacq: coll: IV. t. 8. f. 2. (In montibus *Helvet: Hispan: Pedem: iisdem locis BALB: el: p. 6.*). Thallus areolato - lobatus albo - pulverulentus lobis planis repando-sub-lobatis, apotheciorum discus planus rufo-fuscus margine thallode tenui integro.

\* 83. *P. lentigera* = Ach: meth: p. 192. = Spr: syst: IV. 295. Sub *Lecanora* Ach: lichen: univ: p. 423. = Sub *Lichene* Web: spic: fl: germ: p. 192. t. 3. (*Eur: ad terram et muscos in montibus. Pedem: circa Vernon, in valle Pisii et Viù BELLARD: app: p. 62. Frequens in glareosis di Chianoc RE fl: segus: p. 90. ambo sub Lichene. Sabaud: BILLET in litt: sub Squamaria. Sardin: in terra frequens MORIS st: sard: III. p. 19. sub Lecanora*). Thallus sub-imbricatus albus



lobis concaviusculis flexuosis inciso-crenatis, apotheciorum discus planiusculus flavo - rufescens margine thallode elevato per ætatem pulverulento rugosiusculo crenulato.

\* 84. *P. Smithii* = Spr: syst: IV. 295. = Sub *Lecanora* Ach: lichen: univ: p. 410. Sub *Lichene* Ach: lich: suec: aliique. *Lichen fragilis* Scop: et *gypsaceus* Sm: = Michel: gen: 94. t. 1. f. 1. (*Eur: austr: ad rupes calcareas. Pedem: in rupibus supra Busso-lino et supra Foresto BALB: misc: alt: p. 36. sub Lichenc. In summo M. Musiné RE fl: tor: II. p. 236. sub Lecanora. Ad rupes montis Rosæ BIROLI fl: acon: II. p. 173. sub Lecidea*). Thallus flavescens e lobis valde irregularibus flexuosis crassis concretis margine albidis sub - imbricatus, apothecia thalli lobos sub - æquantia eisque pallidiora ceterum difformia margine thallode albo-pulverulento sub-evanido.

\* 85. *P. glaucocarpa* = Ach: meth: p. 182. = Sub *Lecanora* Ach: lichen: univ: p. 410. = Sub *Lichene* Wahlemb: nov: act: Stockh: vol. XXVII. p. 143. t. 4. f. 4. (*Gottland: Oeland: Pedem: in M. Cenisio supra tellurem RE app: II. p. 212. sub Lecanora*). Thallus ex areolis convexiusculis sub - imbricatis difformibus virescenti-fuscis in ambitu pallidioribus crenatis, apothecia planiuscula cæsia demum convexa rufa margine thallode elevato integro vel flexuoso. Omissa a SPR:

## IV. Thallo crustaceo uniformi.

*a Apotheciis atris.*

\* 86. *P. atra* = Ach: meth: p. 154. = Spr: syst: IV. 295. Sub *Lecanora* Ach: lichen: univ: p. 344. Sub *Lichene* Huds: aliique = *Lichen cinereus* Wulf: in Jacq: coll: II. t. 14. f. 5. 6. non L. Dill: musc: t. 18. f. 5. A (Ad saxa et rupes ubique. *Pedem: alla Torre del colle* in prov: *Segus: RE* app: II. p. 210. *Sabaud: BILLET* in litt: sub *Patellaria tephromeles*). Crusta cinereo-alba rimoso-arcolata, apothecia planiuscula disco atro margine thallode turgidiusculo libero demum flexuoso crenulatoque valde variante numquam tamen discum tegente.

\* 87. *P. scruposa* = Spr: syst: IV. 296. excl: syn: *Lichenis bryophili* = Sub *Urceolaria* Ach: lichen: univ: p. 338. Sub *Lichene* Schreb: aliique. *Lichen ocellatus* Wulf:, *excavatus* Relhan: = Engl: bot: t. 266. Jacq: coll: II. t. 3. f. 3. (*Eur: ad terram et arborum cortices. Pedem: passim supra lapides BELLARD: app: p. 58. sub Lichene. Ad tellurem in sylvis della Mandria et in summo M. Musiné RE fl: tor: II. p. 231. sub Urceolaria. Sabaud: BILLET* in litt: sub ead: et sub *Variolaria lactea. Sardin: ad terram et saxa MORIS st: sard: III. p. 22. sub ead:*). Crusta cinerescens rugoso-plicata granulata, apothecia immersa urceolata nigra margine thallode tumido sub-crenulato discum sub-obtegente. Huc refert SPR: *Variolariam lacteam* Ach: l. c. p. 321. (*Lichen lacteus* L.) quam habuit

BELLARD: ex *Sabaud*: (app: p. 55.), et crescit etiam in *Sardin*: ad rupes et saxa (MORIS st: sard: III. p. 22.); illam non vidi, sed ex descr: ACH: videtur stirps valde diversa; cave ne ipsam confundas cum *L. lacteo* SCHREB: qui pertinet ad *Lecideam albam* ACH: l. c. p. 183. inter dubias.

\* 88. *P. bryophila* = Nob: = Sub *Urceolaria* Ach: lichen: univ: p. 341. tab: VI. f. 10. Sub *Lichene* Ehrh: *Lichen impressus* Sw: alique. *P. scruposa* Spr: syst: IV. 296. in parte = Hoffm: pl: lich: t. 21. f. 1. (*Eur*: ad terram et supra muscos. *Pedem*: in collibus *Taurinens*: BALB: fl: taur: p. 187. sub *Lichene impresso*, et RE fl: tor: II. p. 231. sub *Urceolaria*). Differt a priori, cum qua confusa a SPR:, crustæ ambitu *sub-effigurato*, margine thallode *verticali* nec discum tegente. Color thalli saturatio in specim: meis.

\* 89. *P. verrucosa* = Spr: syst: IV. 296. excl: syn: *Lecanoræ Leucopis* = Sub *Urceolaria* Ach: lichen: univ: p. 339. = Ic:? (*Helvet*., *Scandinav*: *Pedem*: prope *Venariam* RE fl: tor: II. p. 231. Prope *Monasterum* in valle *Lancei* RE app: II. p. 209.). A præcedentibus hujusce sectionis distinguitur crusta *verrucis hemisphæricis* adpersa, apotheciis in *verrucis* immersis, margine proprio *bicolori*, thallode *sub-nullo*. Synonymia hujusce stirpis valde obscura; sec: SPR: ad illam spectant *Urceolaria gibbosa* et *Porina glomerata* ACH: a me non visæ.

\* 90. *P. Leucopis* = Nob: = Sub *Lecanora* Ach: lichen: univ: p. 354. *P. verrucosa* var: Spr: syst: IV. 296. = Ic:? (*Helvet*: ad saxa. *Pedem*: in sylvis della *Mandria* RE fl: tor: II. p. 232. sub *Lecanora*). In



hac occurrunt *apothecia ochra et spuria*; ceterum cum *verrucosa* facile confunditur.

\* 91. *P. cinerea* = Nob: = Sub *Urceolaria* Ach: lichen: univ: p. 336. Sub *Lichene* L. non Wulf: *Lichen ocellatus* et *fimbriatus* quorund: = Hoffm: pl: lich: t. 57. f. 1. pro var:  $\beta$  *tigrina*, t. 4. f. 3. pro var:  $\gamma$  *polygonia*, et t. 20. f. 2. pro *Verrucaria ocellata* sec: Ach: l. c. *P. multipuncta* Spr: syst: IV. 296. (Eur: passim ad rupes saxa et ligna. *Pedem*: in montibus et collibus frequens ALL: n. 2534. sub *Lichene*. *Nel parco della Veneria* RE fl: tor: II. p. 230. 231. et app: II. p. 209. 210. sub *Urceolaria ocellata* et *cinerea*. Ad rupes Alpium vulgaris BIROLI fl: acon: II. p. 180. sub *Urceolaria fimbriata*. *Sardin*: ad saxa MORIS st: sard: III. p. 22. sub *Urceolaria cinerea*). Crusta rimosa areolato-verrucosa cinerea interdum nigro-limitata vel fusco-nigricante ambitu quandoque radiato, apothecia immersa atra sub-marginata margine thallode sub-elevato integro vel crenulato. Per ætatem quamplurimum ludit. Huc pertinet *Lichen polygonius* VILL: quem habuit e *Sabaud*: cl: BELLARD: (app: p. 59.).

\* 92. *P. commutata* = Nob: = Sub *Lecanora* Ach: lichen: univ: p. 352. *Parmelia periclea* Spr: syst: IV. 296. = Ic: ? (*Helvet*: ad truncos arborum. *Pedem*: supra Æsculi Hypocastani corticem prope *Venariam* RE app: II. p. 210. et fl: tor: II. p. 232. sub *Lecanora*). Crusta tenerrima sub-cartilaginea sub-rimosa granulis tenuissimis albo-virescentibus adspersa, apothecia crassa disco concaviusculo nigro margine thallode concolore demum pulverulento. An huc pertineat

*Lecanora peridea* var:  $\gamma$  *exigua* Ach: ceu monet SPR: , valde dubito ex descr: Auctoris; hæc enim non quadrat cum planta pedemontana.

*B Apotheciis fuscis.*

\* 93. *P. subfusca* = Ach: meth: p. 167. = SPR: syst: IV. 297. Sub *Lecanora* Ach: lichen: univ: p. 393. tab: VII. f. 6. Sub *Lichene* L. aliiue = DILL: musc: t. 18. f. 16. (*Eur:* ad arbores et saxa. *Pedem:* in rupibus et corticibus arborum non infrequens locis montanis ALL: n. 2547. sub *Lichene*. RE fl: tor: II. p. 235. sub *Lecanora*. Ad truncos Populi tremulæ frequens BIROLI fl: acon: II. p. 181. sub *Parmelia*. *Sardin:* ad truncos arborum MORIS st: sard: III. p. 20. sub *Lecanora*. *Sabaud:* BILLET in litt: sub *Patellaria hypnorum?*, *subfusca* et *Variolaria discoidea*). Crusta præcedentis sed *lævigata albo-cinerea*, apotheciorum discus *plano-convexiusculus fusco-niger*. Variat thalli et apotheciorum colore; summas Alpes ascendit et habeo ex *M. Cenisio*. Huc pertinet sec: STREUD: (sub *Thelotrema varioloide*) *Lichen carpineus* L. et ALL: n. 2542. omissus ab Ach: et SPR:

\* 94. *P. detrita* = Ach: meth: p. 171. = SPR: syst: IV. 297. Sub *Lecanora* Ach: lichen: univ: p. 376. = Hoffm: pl: lich: t. 64. f. 1. 4. (*Eur:* ad cortices arborum. Habeo lectam a PERRET in cortice *Quercus Roburis* prope *Aix* in *Sabaud:*). Crusta verrucosa cinereo-candicans inæquabilis, apothecia adpressa demum elevata difformia disco carneo-sub-rufescente margine thallode crassiusculo crenato.

\* 95. *P. badia* = Spr: syst: IV. 297. = Sub *Lecanora* Ach: lichen: univ: p. 407. *Lichen badius* Ach: lichen: suec: non Gmel: *Parmelia squamulosa* Ach: meth: = *Lichen picinus* Dicks: crypt: brit: IV. t. 12. f. 5. pro var:  $\gamma$  *fuscata* (Eur: ad saxa et muros. *Pedem*: locis similibus BALB: el: p. 5. sub *Lecanora*). Crusta sub-rimosa irregularis varie areolata glabra virescenti - lurida, apothecia immersa demum elevata disco planiusculo margine thallode elevato integro flexuoso. Non confundenda cum *Lichene badio* GMEL: ad *P. bruneam* n. 81. spectante.

\* 96. *P. rubricosa* = Nob: = Sub *Lecanora* Ach: lichen: univ: p. 386. = Ic: ? (In *Helvet*: rupibus. *Pedem*: prope *Venariam* RE app: II. p. 211. et fl: tor: II. p. 235. sub *Lecanora*). Crusta irregularis e verrucis parvis albissimis sub-pulverulentis, apothecia plana dilute rubra demum convexiuscula obscure fusca margine thallode tenui albo tandem flexuoso. Omissa a SPR:

$\gamma$  *Apotheciis pruinosis.*

\* 97. *P. contorta* = Spr: syst: IV. 298. = *Urceolaria calcaria* et *Lecanora variabilis* Ach: lichen: univ: p. 340. 369. sec: Spr: *Lichen calcarius* L., *variabilis* Pers: = Dill: musc: t. 18. f. 8. (Eur: ad rupes calcarias et saxa. *Pedem*: saxis adhæret locis præsertim collinis umbrosis ALL: auct: p. 51. n. 2538. sub *Lichene calcario*. RE fl: tor: II. p. 231. sub *Urceolaria calcaria*. Ad arcem di *Arona* ubique BIROLI fl: acon: II. p. 180. sub ead:). Crusta tenuissime areo-



lata sub - farinosa albida vel cinarescens, apothecia immersa concaviuscula nigra margine thallode sub-elevato pulverulento. Planta pro synonymia dubia.

\* 98. *P. Glaucoma* = Ach: meth: p. 160. = Spr: syst: IV. 298. Sub *Lecanora* Ach: lichen: univ: p. 362. *Lichen Glaucoma* et *sordidus* quorund: = *Patellaria* et *Verrucaria Glaucoma* Hoffm: pl: lich: t. 52. 53. (*Eur:* ad saxa et montes. *Pedem:* supra lapides et in *M. Musiné* RE app: II. p. 210. et fl: taur: II. p. 233. sub *Lecanora*. In rupibus vulgaris BIROLI fl: acon: II. p. 180. sub *Parmelia*. *Sabaud:* BILLET in litt:). Crusta rimoso-areolata albo-cinarescens æqualis, apothecia immersa demum convexa difformia disco glauco-pruinoso tandem nigro marginem thallodem demum flexuosum superante. Variat multimode per ætatem et stationem, præsertim colore crustæ et apotheciorum. Huc dubitanter refertur a cl: BIROLI l. c. *Lichen rupicula* L. auctoritate STEUD:

\* 99. *P. cænisia* = Spr: syst: IV. 299. = Sub *Lecanora* Ach: lichen: univ: p. 361. = Ic: ? (Ad rupes in *M. Cenisio* BALB: el: p. 5.). Crusta granulata cinereo-albicans, apothecia plana demum ampla disco convexo sub-pruinoso nigro marginem thallodem crenatum granulatum et tandem lobatum superante.

\* 100. *P. Villarsii* = Spr: syst: IV. 299. = Sub *Lecanora* Ach: lichen: univ: p. 360. tab: VII. f. 4. = *Lichen ocellatus* Vill: delp: III. p. 998. t. 55. (In alpibus *Ital:*, *Gallia* ad saxa et rupes. *Pedem:* ad rupes calcareas signatim ad basim *S. Michaëlis* in valle *Segus:* BELLARD: app: p. 58. Abunde supra rupes circa *Segus:* RE fl: segus: p. 90. ambo sub *Lichene ocellato*.

*Sardin:* ad rupes calcareas saxaque MORIS st: sard: III. p. 20. sub *Lecanora*). Crusta gyroso-plicata granulata albescens, apothecia frequentia majuscula disco concavo nigro-cæsiio margine thallode crassiusculo integro demum sub-crenato.

\* 101. *P. sulfurea* = Spr: l. c. ex Ach: = *Patellaria incrustans* DC. (Ad saxa et rupes *Sabaud:* BILLET in litt: sub *P. sulfurea* et *incrustedata*). Crusta rimoso-diffracta inæquabilis lævigata leviter sulfurea, apothecia plana fusco-pruinosa demum difformia margine tenni pallidiori.

\* 102. *P. galactina* = Ach: meth: p. 190. = Sub *Lecanora* Ach: lichen: univ: p. 424. *Parmelia angulosa* var: Spr: syst: IV. 299. = Ic: ? (*Eur:* passim in muris saxis et rupibus. *Pedem:* iisdem locis BALB: el: p. 5.). A priori distinguitur crusta sordide alba ambitu lobato-crenata, apotheciorum disco planiusculo carneo-fuscescente pruinoso. Variat crusta dispersa, apotheciis dilute fusco-cæsiis (*Lecanora galactina* var:  $\beta$  dispersa ACH: l. c. *Lichen dispersus* PERS:); hanc habeo lectam a PERRET in truncis arborum *Aix* in *Sabaud:* *P. angulosa* crescit pariter in *Sabaud:* sec: BILLET in litt:

\* 103. *P. lutescens* = Flork: in mag: neuv: Berl: 1807. I. p. 15. = Spr: syst: IV. 299. Sub *Lecanora* Ach: lichen: univ: p. 367. = Ic: ? (*Eur:* ad corticem arborum. *Pedem:* supra saxa in montibus *Limoni* lectam a VIALE habeo a BELLARD:). Crusta tenuis valde effusa sulfureo-viridescens, apotheciorum discus plano-convexus flavo-rufescens cæsiio-pruinosis, margo thallodes flexuosus.

♂ *Apotheciis pallidis lividis.*

\* 104. *P. albella* = Ach: meth: p. 163. = Spr: syst: IV. 300. Sub *Lecanora* Ach: lichen: univ: p. 369. Sub *Lichene* Pers: = Ic: ? (*Eur*: in cortice arborum. *Pedem*: in cortice *Quercus* in sylvis *della Mandria* Re app: II. p. 210. et fl: tor: II. p. 233. sub *Lecanora*). Crusta contigua membranacea subnitida lactea, apothecia sparsa concaviuscula subcarnea margine thallode tumido inflexo integerrimo.

\* 105. *P. parella* = Ach: met: p. 164. = Spr: syst: IV. 300. Sub *Lecanora* Ach: lichen: univ: p. 370. Sub *Lichene* L. alii que. *Lichen pallescens*, *albo-flavescens*, *upsalensis* et *tumidulus* quorund: = Dill: musc: t. 18. f. 10. pro typo, et f. 17. pro var:  $\beta$  *pallescente*. Hoffm: pl: lich: t. 21. f. 2. a b pro var:  $\beta$  *pallescente*, t. 21. f. 2. pro var:  $\gamma$  *upsalensi* (*Eur*: ad saxa terram et arbores. *Pedem*: in corticibus arborum locis subalpinis ALL: n. 2546. sub *Lichene pallescente*. In monte *Mole Sabaud*: BELLARD: app: p. 59. sub *Lichene parello*. In sylvis *della Mandria* prope corticem *Quercuum* Re fl: tor: II. p. 244. sub *Lecanora*. *Sardin*: ad rupes et saxa MORIS st: sard: III. p. 19. cum var:  $\gamma$  *upsalensi*. *Sabaud*: BILLET in litt: sub *Patellaria upsalensi*). Crusta rimosa plicato-verrucosa alba, apothecia conferta crassiuscula sub-concoloria disco concaviusculo margine thallode turgidiusculo integro; in var:  $\beta$  crusta sordide alba, apotheciorum discus planiusculus pallescens; in var:  $\gamma$  crusta læ-



vigata albo-glauescens, apotheciorum discus pallide lutescens.

\* 106. *P. carneo-lutea* = Spr: syst: IV. 300. ex Turn: = Sub *Lecanora* Ach: lichen: univ: p. 374. = Ic: ? (Ad arborum cortices in *Anglia, Gallia. Pedem: supra corticem Quercuum prope Venariam* RE app: II. p. 210. et fl: tor: II. p. 234. sub *Lecanora*). Crusta tenuissima lævis albo-incana, apothecia parva adpressa disco demum plano carneo-lutescente margine thallode sub-inflexo sub-crenato.

\* 107. *P. exanthematica* = Spr: syst: IV. 300. = Sub *Thelotrema* Ach: lichen: univ: p. 312. tab: VI. f. 2. = Sub *Urceolaria* Ach: meth: Sub *Lichene* L. aliique. *Lichen clausus* Hoffm.; *volvatus* Vill: delph: t. 55. (*Eur: in rupibus præsertim calcariis. In Sabaud: BELLARD: app: p. 57. sub Lichene BILLET in litt: sub Volvaria*). Vix differt a priori crusta cinerea, apotheciis semi-immersis convexis, margine thallode radiato-rimoso.

\* 108. *P. conchilioides* = Nob: = Sub *Volvaria* DC. fl: fr: n. 1011. Sub *Thelotremate* Duby bot: gall: p. 673. = Ic: ? (In rupibus silaceis circa *Parisios. Sabaud: BILLET in litt: sub Volvaria*). Crusta subnulla, verrucæ rotundatæ applanatæ albæ sub-depressæ apice apertæ post apotheciorum lapsum cyathiformes, apothecia nigra orbiculata lentiformia.

\* 109. *P. tartarea* = Ach: meth: p. 165. = Spr: syst: IV. 300. Sub *Lecanora* Ach: lichen: univ: p. 371. tab: VII. f. 3. Sub *Lichene* L. aliique. = *Lichen saxorum* Fl: dan: t. 712. f. 1. *Lichen frigidus*

L. aliique. Ach: nov: act: Stockh: t. 6. f. 2. (*Eur:* ad saxa et terram. *Pedem:* frequens in rupibus ad montium radices ALL: n. 2545. Supra saxa RE fl: segus: p. 87. ambo sub *Lichene*. Ad muros in valle *Salicum* RE app: I. p. 40. et fl: tor: II. p. 234. sub *Lecanora*. Ad rupes alpinas frequens BIROLI fl: acon: II. p. 181. *Sardin:* ad rupes MORIS st: sard: III. p. 20. sub *Lecanora*). Crusta tartarea granulato-conglomerata ex albo glaucescens vel virescens granulis subpulverulentis quandoque in ramulos spinulosos abeuntibus (*Lichen frigidus*), apothecia sparsa disco plano testaceo margine thallode inflexo demum flexuoso.

ε *Apotheciis rubris.*

\* 110. *P. marmorea* = Ach: meth: p. 170. = Spr: syst: IV. 301. Sub *Lecidea* Ach: lichen: univ: p. 192. *Lichen marmoreus* Scop: et *cupularis* Hedw: = Engl: bot: t. 739. pro *L. marmoreo*. Hedw: st. cr: II. t. 20. f. B pro *L. cupulari* (*Eur:* ad saxa et terram. *Sabaud:* supra rupes calcarias circa *Turrim* BELLARD: app: p. 59. sub *Lichene cupulari* et BILLET in litt: sub *Patellaria cupulari*. *Pedem:* in rupibus calcareis montanis BIROLI fl: acon: II. p. 172. sub *Lecidea cupulari*). Crusta plus minus tenuis albo - cinascescens vel virescens, apothecia parva urceolata alba extus passim pulverulenta disco carneo vel dilute lateritio margine tumido integro. *L. cupularis* non differt a typo nisi crusta crassiori albo - virescente. Huc quoque referenda sec: SPR: *Gyalecta epulotica* Ach: lichen: univ: p. 151. quam cl: RE invenit supra ru-

pem ad boream expositam ad radicem *M. S. Michaëlis* (app: II. p. 207.).

\* 111. *P. rubra* = Ach: meth: p. 170. = Spr: syst: IV. 301. Sub *Lecanora* Ach: lichen: univ: p. 389. = Sub *Verrucaria* Hoffm: pl: lich: t. 17. f. 2. *Lichen ulmi* Sw:; *pallidus* Hoffm: en: lich: t. 5. f. 2., *pruinosis* Humb:; *Dufresni* Bellard: (*Eur*: ad arbores. *Pedem*: in cortice *Mori* albæ vulgatissima *BIROLI* fl: acon: II. p. 181. Habeo etiam ex *Sabaud*: lectam supra corticem *Fraxini* a *DUFRESNE* *BELLARD*: app: p. 60. sub *Lichene Dufresni*. *Sardin*: ad corticem *Quercuum* in montibus *MORIS* st: sard: III. p. 19. sub *Lecanora*). Differt a priori præsertim crusta *granulato-pulverulenta alba*, apotheciis *concavis* saturate *rubris*, margine *crenulato*.

112. *P. Hæmatomma* = Ach: meth: suppl: p. 35. Spr: syst: IV. 301. Sub *Lecanora* Ach: lichen: univ: p. 388. (*Eur*: ad rupes et saxa. *Sardin*: in terra calcarea *MORIS* st: sard: III. p. 19. sub *Lecanora*). Distinguitur a præcedenti crusta *tartarea sulphurea*, apotheciis *convexis*, margine *pulveraceo*.

VII. *STICTA* Schreb: gen: pl: V. p. 768. = Spr: syst: n. 3379. = Ach: lichen: univ: p. 86. et 445. tab:

VIII. = *Parmeliæ*, *Pulmonariæ*, *Platismæ*, *Deliseæ* spec: nonnul: quorund:

» *Apothecia* disciformia crassiuscula sub - sessilia  
 » sub - marginata. *Lamina* prolifera sub - cornea di-  
 » scum apothecii formans substantia thallode sub-  
 » strata. *Cyphellæ* in strato inferiori thalli (non  
 » semper): »



*Obs:* Genus ab affinibus satis distinctum præcipue præsentia *cyphellarum* intra lanuginem strati inferioris thalli, quibus fere omnes *Stictæ* instructæ adparent, constans ex SPR: 32. stirpibus, quarum paucae europææ.

\* 1. *St. sylvatica* = Ach: lichen: univ: p. 454. = Spr: syst: IV. 302. Sub *Lichene* L. sp: 1621. non All: = Dill: musc: t. 27. f. 101. (*Eur:* sylvis ad terram et arborum radices. *Pedem:* inter muscos ad rupes alpinas BIROLI fl: acon: II. p. 194. In sylvis *Sabaud:* prope *Chamberium* BELLARD: app: p. 67. Habeo etiam lectam a BELLARD: in sylvis septentrioni expositis prope *Viù* trans *Sturam*). Thallus expansus membranaceo-foliaceus profunde inciso-lobatus olivaceo-fuscus subtus villosus, apothecia marginalia fusca haud marginata, cyphellæ excavatæ albo-pallescentes.

\* 2. *St. pulmonacea* = Ach: lichen: univ: p. 449. = Spr: syst: IV. 302. *Lichen pulmonarius* L. alii que = Dill: musc: t. 29. f. 113. (*Eur:* ad arborum truncos. *Pedem:* in sylvis umbrosis ad arbores præsertim *Quercus* et *Fagi* ALL: n. 2559. Uberrime in castanetis *di Giaveno* et prope templum *S. Michaëlis della Chiusa* RE fl: segus: p. 88. ambo sub *Lichene pulmonario*. In sylvis umbrosis arboribus innascitur RE fl: tor: II. p. 238. Ad truncos arborum præsertim in pomietis BIROLI fl: acon: II. p. 188. sub *Parmelia*. *Sardin:* ad truncos in sylvis MORIS st: sard: III. p. 22.). Thallus valde expansus irregularis etiam pedalis glaucescenti-viridis profunde sinuosus lacunoso-reticulatus subtus villosus - papulosus papulis albidioribus subnudis, apothecia rara sub-marginalia disco planius-

culo rufo margine thallode sub-rugosa. Defectu cyphellarum ad *Parmeliam* nonnulli ducunt hanc stirpem, sed thalli habitu et apotheciorum forma ad *Stictam* magis accedit.

\* 3. *St. scrobiculata* = Ach: lichen: univ: p. 453. = Spr: syst: IV. 302. Sub *Lichene* Scop: aliiue = *Lichen verrucosus* Wulf: in Jacq: coll: IV. t. 18. f. 2. Dill: musc: t. 29. f. 144. (*Eur:* ad terram inter muscos in saxis et arborum truncis. *Pedem:* locis valde umbrosis super rupes vallis *Lancei* eundo ad Sanctuarium *di Marsaglia*; in valle *Locana* minus frequens BALB: add: p. 100.). Thallus glauco-virescens lævis scrobiculatus lobis irregularibus rotundatis subtus lanuginosus passim cyphillis seu sorediis maculiformibus albis adpersus, apothecia sparsa disco planiusculo rufo margine thallode sub-crenato.

\* 4. *St. crocata* = Ach: lichen: univ: p. 447. = Spr: syst: IV. 302. Sub *Lichene* L. aliiue. = Dill: musc: t. 84. f. 12. (*Eur:*, *Ind:* occid:, *Afr:* austr: *Pedem:* in *M. Cenisio* versus *Lanslebourg* supra cortices *Pini* BELLARD: app: p. 66. Ibidem prope *l'Eau blanche* RE fl: segus: p. 90. ambo sub *Lichene*). Thallus parum expansus glauco-fuscescens lacero-lobatus margine pulverulento flavidus subtus badio-villosus, apothecia sparsa fusco-nigra, cyphellæ seu potius soredia punctiformia citrina.

VIII. PELTIGERA Spr: syst: n. 3380. ex Hoffm: = *Nephromæ* et *Peltideæ* spec: plurimæ Ach: = *Parmeliæ*, *Stictæ* et *Solorinæ* spec: perpaucæ Ach:

» *Apothecia* peltiformia plana orbiculata vel reni-

» formia. *Lamina proligera* supra thallum tota obli-  
 » que adnata margine thallode elevato undique cincta.»

*Obs:* Genus hocce distinguit præsertim apothecium  
 a sola lamina proligera fere constitutum, ac ejus fi-  
 gura peltiformis; differentia inter *Peltideam* et *Ne-*  
*phromam* ex apothecio *sub-orbiculato* in prima, *re-*  
*niformi* in altera, vix attendenda, hinc bene exemplo  
 HOFFM: aliorumque iterum a SPR: conjunctæ. Species  
 18. circiter maxima ex parte europææ.

\* 1. *P. polydactyla* = Spr: syst: IV. 304. ex  
 Hoffm: = Sub *Peltidea* Ach: lichen: univ: p. 519.  
 Sub *Lichene* Neck: aliiue. = Dill: musc: t. 28. f.  
 107. (*Eur:* ad terram in sylvis. *Pedem:* locis alpe-  
 stribus editioribus præcipue sub Juniperis BALB: de  
 crepid: p. 6.). Thallus expansus glauco-virescens su-  
 pra glaber nitidus subtus venis fuscis reticulatus varie  
 lobatus lobis principalibus rotundatis lobulis fertilibus  
 elongatis digitatis margine reflexis et fere tubulosis,  
 apothecia in his terminalia obscure fusca fere nigra  
 rotundato-oblonga.

\* 2. *P. canina* = Spr: syst: IV. 305. ex Hoffm:  
 = Sub *Peltidea* Ach: lichen: univ: p. 515. Sub *Li-*  
*chene* L. aliiue = Dill: musc: t. 27. f. 102. pro  
 typo et f. 107. pro var: *ε crispa*. *Lichen rufescens*  
 Neck: (*Eur:* passim ad terram. *Pedem:* in sylvis ste-  
 rilibus montanis frequens ALL: n. 2567. RE fl: segus:  
 p. 88. ambo sub *Lichene*. Supra cortices Ulmorum  
 secus ambulacra R. *Valentini* BELLARD: app: p. 60.  
 sub *Lichene rufescenti*. Ubique in sylvis RE fl: tor:  
 II. p. 245. Super terram ad sepes vulgaris BIROLI fl:  
 acon: II. p. 195. cum var: *rufescenti*. *Sardin:* in syl-



vis *Arizzo* MORIS st: sard: III. p. 21. omnes sub *Peltidea*. *Sabaud*: BILLET in litt: ). A priori distinguitur colore thalli superne cinascente sub-tomentoso, venis inferioribus fere concoloribus, apotheciis generatim majoribus magisque rotundatis. *P. rufescens* SPR: l. c. non differt nisi colore thalli rufescente, lobulis crispis rarissime fertilibus.

\* 3. *P. aphrosa* = SPR: syst: IV. 305. ex Hoffm: = Sub *Peltidea* Ach: lichen: univ: p. 516. tab: X. f. 7. Sub *Lichene* L. aliique = DILL: musc: t. 18. f. 106. JACQ: coll: IV. t. 14. f. 1. pro var:  $\beta$  *verrucosa* (*Eur*: passim ad terram. *Pedem*: in sylvis abienis, inter *Bramant* et *Modane* in *Sabaud*: ALL: n. 2568. BILLET in litt: In montanis apricis RE fl: segus: p. 88. sub *Lichene*. In sylvis della *Mandria* et in editioribus collibus RE fl: tor: II. p. 244.). Differt a duabus præcedentibus thallo livide virescente lævigato frequenter verrucis (*cephalodiis*) fuscis adperso, venis inferioribus nigris, lobis fertilibus in medio angustatis, apotheciis amplioribus, margine thallode inflexo sub-lacero.

\* 4. *P. horizontalis* = SPR: syst: IV. 305. ex Hoffm: = Sub *Peltidea* Ach: lichen: univ: p. 515. tab: X. f. 6. Sub *Lichene* L. aliique = DILL: musc: t. 28. f. 104. B pro typo et 104. A pro var:  $\alpha$  *lophyra* (*Eur*: ad terram et saxa inter muscos. *Pedem*: in valle *Patonera* collium *Taurinens*: BALB: fl: taur: p. 190. BELLARD: app: p. 57. sub *Lichene* et RE fl: tor: II. p. 244. sub *Peltidea*. Habeo lectam in valle *Viucensi* locis sylvaticis a BELLARD: *Sardin*: inter muscos in sylvis MORIS st: sard: III. sub ead:). Thallus coriaceus late

expansus glauco fuscoque virescens glaber subtus e tomento denso nigro-fusco interstitiis albis reticulatus lobis principalibus magnis sub-lobatis fertilibus abbreviatis, apothecia plana horizontalia rufo-fusca margine thallode integro.

\* 5. *P. venosa* = Spr: syst: IV. 305. ex Hoffm: = Sub *Peltidea* Ach: lichen: univ: p. 514. Sub *Lichene* L. aliique. = Dill: musc: t. 28. f. 109. (*Eur*: passim ad terram. *Sabaud*: in sylvis prope S. Remy ALL: auct: n. 2567. \* p. 51. *Pedem*: in M. Cenisio RE fl: segus: p. 88. Ad arborum radices supra la Maddalena BALB: fl: taur: p. 189. omnes sub *Lichene*. RE fl: tor: II. p. 244. sub *Peltidea*. Super terram frequens BIROLI fl: acon: II. p. 194. sub ead:). Thallus parvus cinereus sub-rotundo-lobatus subtus venis ramosis cinereo-fuscis notatus, apothecia marginalia plana rotunda tumidula obscure fusca margine thallode sub-crenulato.

\* 6. *P. resupinata* = Spr: syst: IV. 305. = Sub *Nephroma* Ach: lichen: univ: p. 522. Sub *Lichene* L. aliique = Dill: musc: t. 28. f. 105. (*Eur*: , *Amer*: bor: Ad saxa, terram et arborum radices. *Pedem*: in summa valle Patonera collium Taurinens: BALB: fl: taur: p. 189. In sylvaticis alpestribus a M. Cenisio ad Uxellium BELLARD: app: p. 68. ambo sub *Lichene*. In collibus Taurinens: RE fl: tor: II. p. 245. sub *Nephroma*. Sardin: in sylvaticis montanis frequens MORIS st: sard: III. p. 20. sub ead: Sabaud: BILLET in litt:). Thallus expansus plumbeo-virescens e lobis surrectis rotundato-laciniatis supra glaber subtus hir-

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sutiusculus ibique interdum sorediis albis adpersus lobulis fertilibus brevibus, apothecia sub-orbiculata resupinata fusca margine thallode sub-lacero; apothecia semper sub-orbiculata vidi nec reniformia uti in descr: Ach.; hæc interdum gemina occurrunt.

\* 7. *P. polaris* = Spr: syst: IV. 306. = Sub *Nephroma* Ach: lichen: univ: p. 521. Sub *Lichene* Ach: lich: succ: *Lichen arcticus* et *antarcticus* L. aliique = Jacq: misc: t. 10. f. 1. *Lichen groënlandicus* Fl: dan: t. 466. (*Eur*: præsertim bor:, *Amer*: arctica, terra *Magellan*: *Pedem*: reperta in sylvis *Burgi Maxini* BELLARD: app: p. 65.). Differt a priori thallo *albovirescente*, lobis valde *amplioribus* subtus in centro *tomento nigro* tectis, apotheciis *majoribus coccineis*.

\* 8. *P. crocea* = Hoffm: pl: lich: II. 3. p. 60. t. 41. f. 2. 4. = Spr: syst: IV. 306. Sub *Solorina* Ach: lichen: univ: p. 149. tab: 1. f. 5. Sub *Lichene* L. aliique = Dill: musc: t. 30. f. 120. (*Eur*: subalpinis passim. *Pedem*: in summis alpidibus *di Viù* ad nivem deliquescentem et in monte *Sabaud: la Venoesa* dicto BELLARD: app: p. 67. sub *Lichene*. In alpidibus super terram vulgaris *BIROLI* fl: acon: II. p. 195. sub *Peltidea*. *Mauriana* BILLET in litt:). Thallus coriaceus repando-lobatus lobis sub-rotundis quasi e centro communi prodeuntibus supra cinnamomeis subtus croceo-venosis, apothecia in disco superiori majuscula sub-rotunda convexiuscula spadicea immarginata.

\* 9. *P. saccata* = Spr: syst: IV. 306. = Sub *Solorina* Ach: lichen: univ: p. 149. tab: 1. f. 6. Sub *Lichene* L. aliique. *Lichen immersus* Huds: = Dill: musc: t. 30. f. 121. (*Eur*: in rupibus ad terram. *Pe*-



*dem*: in rupibus Alpium editiorum ALL: n. 2569. Ob-  
via prope Segus: supra rupem dictam *delle tre Penne*  
RE fl: segus: p. 88. ambo sub *Lichene*. Super terram  
in sylvis et sepibus locis collinis et montanis BIROLI  
fl: acon: II. p. 196. sub *Peltidea*. *Sabaud*: BILLET in  
litt:). Distinguitur a priori colore thalli superne ci-  
*nereo-virescenti* subtus *albidiori fusco-fibrilloso*, apo-  
theciis *fuscis* demum *saccato-immersis*.

Obs: geographica circa *Hymenothalamos*.

*Hymenothalami* per orbem sparsi circiter . . . 620

*Hymenothalami* pedemontani.

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## ORDO CCIII.

## CONIOTHALAMI

(Bartl: ord: nat: p. 8. = *Gymnospori*  
Spr: syst: IV. 238.).

*Char: essentialis.*

» *Sporæ* nudæ in strato proligerò collectæ. »

*Obs:* Thallus aut tenuis horizontalis substrato adhærens, apotheciis coætaneis ut plurimum podetio sustentis, podetio e substantia heterogenea cum ipsis continua facto, aut fruticulosus ramosus apotheciis terminalibus. Genera *Fungis* affinia, 3. ex Spr:, quibus 2. alia conjungenda.

I. CONIOCYBE Spr: syst: n. 3381. = *Trichice* et *Calycii*  
spec: paucae Ach: lichen: univ: p. 232.

» *Apothecia* pileolata. *Stratum* proligerum floccoso-  
» pulverulentum e vertice fatiscente sporangii proprii  
» stipitati in capitulum globosum tumescens. »

*Obs:* Genus constans ex Spr: 3. stirpibus thallo tenuissimo crustaceo donatis, ex crustæ ac capitulorum stipitumque structura et colore determinatis.

\* 1. *C. stilbea* = Spr: syst: IV. 306. = *Calicium cantherellum* Ach: lichen: univ: p. 240. *Lichen cantherellus* et *peronellus* Ach: lich: suec: = *Trichia nivea* Hoffm; veg: cr: t. 4. f. 1. (*Eur:* ad arborum truncos, *Pedem:* ad corticem vetusti Pyri in horto Soc;

agr: *Novar*: unice collegit BIROLI fl: acon: II. p. 471. sub *Calicio*). Crusta tenuissima sub-pulverulenta alba, apothecia (capitulum) lentiformia rufescentia albo-farinosa stipitibus filiformibus demum nudis fuscescentibus.

\* 2. *C. furfuracea* = Spr: syst: IV. 306. = *Calicium capitellatum* et *aciculare* Ach: lichen: univ: p. 241. 242. tab: III. f. 7. 8. = *Trichia furfuracea* et *fulva* With: *Lichen capitatus*, *acicularis*, et *fulvus* quorund: (*Eur*: ad arborum herbarumque radices subputridas. *Pedem*: in ramis exsiccatis arborum in sylvis vallis *Ticini* non rara BIROLI fl: acon: II. p. 174. sub *Calicio aciculari*). A priori distinguitur crusta effusa viridi-flava, apotheciis globosis stipitibusque longissimis capillaribus flavo-vel fulvo-pulverulentis. *Calicium aciculare*, monente Ach:, differt tantum crustæ colore pallidiore, stipitibus brevioribus.

II. CALICIUM Spr: syst: n. 3382. = *Calicii* spec: plures Ach: = *Lecideæ*, *Cyphelii*, *Limboriæ*, *Pyreneteæ*, *Coniangii*, *Spilomæ*, *Verrucariæ* spec: nonnullæ quorund: (Inter *Maziedatas* cl: II. *Calicia* ord: I. Fries).

» *Apothecia* scyphuliformia. *Stratum proligerum*  
» pulveraceum discum marginatum sporangii proprii  
» relinquens. »

*Obs*: Genus nimis obscurum, uti patet ex synonymis supra allatis, vix a *Coniocybe* distinguendum apotheciorum forma, defectu podetii in quibusdam, aliisque levioribus notis, constans ex Spr: 13. stirpi-



bus europæis, inter quas perpaucae pedemontanæ mihi innotescunt.

\* 1. *C. tigillare* = Spr: syst: IV. 307. = Sub *Lecidea* Ach: meth: p. 46. t. 2. f. 1. et lichen: univ: p. 164. = Sub *Lichene* Ach: lich: suec: (*Eur*: ad sepimenta lignea. *Sardin*: ad veteres asseres *Arizzo* MORIS st: sard: IV. p. 18. *Sabaud*: BILLET in litt: sub *Patellaria*). Crusta areolata plicato-verrucosa glabra citrina, apothecia sessilia in verrucis immersa per ætatem prominentia atra disco plano margine elevato tumido integro.

\* 2. *C. sessile* = Pers: tent: disp: fung: suppl: p. 59. = Spr: syst: IV. 307. = *C. turbinatum* et *stigonellum* Ach: lichen: univ: p. 232. tab: III. f. 3. pro *C. turbinato*. With: arr: ed: 3. v. IV. t. 31. f. 1. pro *C. stigonello* sub *Lichene gelatinato* (*Eur*: passim ad truncos arborum et parasiticum in aliis Lichenibus). Crusta sub-continua inæquabilis albicans vel interdum nulla in *C. stigonello*, apothecia sessilia atra turbinata vel sub-globosa in *C. stigonello* disco punctiformi nigro sub-marginato. *C. stigonellum* sæpius occurrit parasiticum in thallo aliorum Lichenum. Huc sub *Cyphelio turbinato* refert STEUD: *Sphæriam sphinctericam* DC. (*Hypoxyton sphinctericum* BULL:) quam RE (fl: tor: II. p. 263.) invenit prope *Altessanum* supra *Alni glutinosæ* truncum emarcidum.

\* 3. *C. salicinum* = Pers: ap: Ust: in ann: d. Bot: st: 7. p. 20. t. 3. f. 3. = Spr: syst: IV. 307. = *C. claviculare* Ach: lichen: univ: p. 234. *Lichen clavellus* Ach: lich: suec:, *sphærocephalus* Sw: *Mucor sphæro-*

*cephalus* L. (*Eur*: ad corticem arborum et sepimenta. *Pedem*: habeo ex valle *Pisii* a BELLARD:). Crusta tenuis granulata cinerea vel interdum sub-nulla, apothecia plus minus longe stipitata globoso-lentiformia stipitibus rigidiusculis nigris; variat multimode præsertim colore disci et longitudine stipitum.

\* 4. *C. subtile* = Pers: tent: disp: fung: suppl: p. 60. = Spr: syst: IV. 308. Ach: lichen: univ: p. 243. = Ic: ? (*Eur*: passim ad ligna vetusta. *Pedem*: ad truncos vetustos *Quercuum* exsiccatos BIROLI fl: acon: II. p. 175.). Crusta tenuissima sub-membranacea albicans, apothecia stipitata globosa sub-cinereo-atra stipitibus filiformibus gracillimis concoloribus.

\* 5. *C. roscidum* = Spr: syst: IV. 308. ex Flork: = *C. hyperellum* var:  $\gamma$  *roscidum* Ach: lichen: univ: p. 238. tab: III. f. 2. (*Eur*: ad cortices arborum. *Pedem*: supra *Morum* albam prope *la Mandria* RE app: II. p. 205. et fl: tor: II. p. 223. sub *Lecidea dryina*). Plantam non vidi; phrasis RE ipsissima ac illa ACH: de *Lecidea dryina* (lichen: univ: p. 178.) quæ valde diversa ab alia de *C. roscido*. Forsan cl: RE, sola auctoritate SPR:, hasce duas plantas conjunxit? Videtur.

\* 6. *C. sulphureum* = DC. syn: fl: gall: p. 73. n. 925. \* = Ic: ? (*Gallia* ad cortices arborum DC. l. c. *Pedem*: iisdem locis in collibus *Taurinens*: BALB: el: p. 4. RE fl: tor: II. p. 225.). Crusta globulosa e luteo virescens, apothecia stipitata globosa tandem fusca stipitibus gracilibus crusta concoloribus. Omissa ab ACH:, STEUD: et SPR:; forsan nonnisi prioris var:

- III. SPHÆROPHORON Ach: lichen: univ: p. 116. 585. tab: XII. = Spr: syst: n. 3383. = *Coralloidis* et *Streocauli* spec: nonnullæ quorund: (Inter *Mazediatos* cl: II. *Sphærophora* ord: II. Fries).

» *Apothecia* sub-globosa in ramis thalli terminalia  
 » denum lacero-rumpentia. *Massa* prolifera in for-  
 » mam nuclei compacta atra dein pulveracea. »

*Obs:* Genus ab omnibus Lichenibus structura apotheciorum valde distinctum, constans ex Spr: 4. stirpibus thallo fruticuloso varie ramoso. Possideo ex *Helvet:* montibus *Sph: coralloideum* (*Lichen globiferus* L.), et *Sph: fragile* (*Lichen fragilis* L.); primum exhibet ramos teretes elongatos fibrillosos, apothecia sub-globosa lævia; alterum ramos abbreviatos nudos, apothecia globoso-turbinata sub-verrucosa. In *Pedem:* non crescunt ut sciam; invenitur tamen in *Sabaud:* *Sph: cæspitosum* DC., monente cl: BILLET in litt., a *fragili* haud diversum sec: STEUD:

- IV. SPILOMA Ach: lichen: univ: p. 23. et 135. tab: I. = *Coniocarpon*, *Arthoniæ*, *Leprariæ*, et *Variolariæ* spec: nonnullæ quorund: (Inter *Coniothalamos* cl: I. *Variolarias* ord: II. Fries).

» *Apothecium* difforme sub-rotundatum immargi-  
 » natum e gongylis nudis conglomeratis composi-  
 » tum. »

*Obs:* Genus ludens inter *Leprarias* et *Trichodermata*, constans ex Ach: 16. stirpibus, inter quas 6. Auctori ipso valde dubiæ, fere omnibus a Spr: omis-  
 sis vel cum stirpibus aliorum generum commutatis.



\* 1. *Sp: rubrum* = Pers: = *Sp: tumidulum* var:  $\beta$  *rubrum* Ach: lichen: univ: p. 137. *Coniocarpon cinnabarinum* DC. fl: fr: n. 880. = Ach: meth: t. 1. f. 5. pro typo (*Eur: ad corticem arborum. Pedem: prope il Parco della Veneria supra corticem Populi dilatatae* RE app: I. p. 48. sub *Coniocarpo cinnabario* et fl: tor: II. p. 220. sub *Spilomate rubro*). Crusta tenuissima albo - vel luteo - cinerascens, apothecia plana adpressa confertissima rotundato-difformia rubra demum fusco-nigra.

\* 2. *Sp: melaleucum* = Ach: lichen: univ: p. 137. = *Coniocarpon nigrum* DC. fl: fr: n. 882. = Ic: ? (*Gallia in cortice Carpini* DC. l. c. *Pedem: prope Venariam supra corticem Salicum emortuarum* RE app: II. p. 206. et fl: tor: II. p. 220.). Differt a priori crusta *alba nigro-limitata*, apotheciis *convexiusculis scabridis atris*.

V. LEPRARIA Ach: lichen: univ: p. 132. 662. tab: XIV. f. 12. 13. = *Pulverariæ*, *Lepræ* spec: quorund: = *Byssi pulverulenti* spec: L. et Auctor: (Inter *Coniothalamos* cl: I. *Leprarias* ord: I. Fries).

» *Apothecium nullum. Gongyli* thallum formantes » inque ejus superficie sparsi ac conglomerati liberi. »

Obs: Genus ad *Athalamos* Ach: spectans et constans ex eodem 55. stirpibus, nunc *Algis* nunc *Lichenibus* nunc *Fungis Byssoides* affinibus, variis valde obscuris, multis a SPR: omissis, nonnullis ad alia genera amandatis. Substantiæ pumilæ fugaces, thallo crustaceo leproso uniformi ut plurimum a gongylis solis formato.

\* 1. *L. flava* = Ach: lichen: univ: p. 663. = *Byssus candelaris* L. aliiue. *Lichen flavus* Schreb: aliiue = Fl: dan: t. 899. f. 2. (*Eur*: ad parietes ligneos et cortices arborum. *Pedem*: in muris et corticibus arborum humido aëri expositos ALL: n. 2662. sub *Bysso candelari*. Minime rara supra arborum corticem RE fl: tor: II. p. 254. sub *Lepraria flava*). Crusta flavissima tota e grenulis (an veri *gongyli*?) subglobosis nudiusculis composita.

\* 2. *L. farinosa* = Ach: lichen: univ: p. 666. = Sub *Lichene* Hoffm: enum: lich: t. 1. f. 1. (*Suecia*, *German*: ad corticem arborum. *Pedem*: similibus locis præsertim supra Sambucum nigram frequens RE app: II. p. 214. et fl: tor: II. p. 255.). Differt a priori crusta *albicante* pulvere conglobato *incano* suffusa.

3. *L. Leiphæma* = Ach: meth: p. 4. t. 1. f. 2. et lichen: univ: p. 664. (*Suecia*, *Helvet*: *Sardin*: ad cortices arborum MORIS st: sard: III. p. 20.). Crusta *lactea* extremo ambitu *pannosa*, granulis *pallidis* a præcedentibus distincta.

Obs: geographica circa *Coniothalamos*.

*Coniothalami* per orbem sparsi circiter . . . 50

*Coniothalami* pedemontani.

<i>Coniocybe</i>	. . . . .	2
<i>Calicium</i>	. . . . .	5
<i>Spiloma</i>	. . . . .	2
<i>Lepraria</i>	. . . . .	2
		<hr/> 11

## Subclassis II.

### Algæ.

(Spr: syst: IV. p. 311. = Agardh: spec: Algar:  
rite cognitæ Lund: 1820. = Ejusd: syst: Algar:  
Lund: 1824. = Bartl: ord: nat: p. 9. = *Algarum*  
pars L. et Juss: = *Hydrophytes* quorund:).

### Char: essentialis.

» Expansiones nudæ vel muco involutæ tota su-  
» perficie aquam absorbentes, gelatinosæ membrana-  
» ceæ vel coriaceæ, e filis articulatis vel continuis  
» simplicibus vel ramosis, nunc liberis nunc in mem-  
» branam frondiformem vel caulescentem connexis,  
» fructificatione invisibili, vel in quibusdam *sporidia*  
» sæpius *receptaculo* (*apothecium*, *sporangium* quo-  
» rund:) inclusa. »

*Obs:* Subclassis naturalissima, continens vegetabilia  
aquatica oxygenum sub aqua soli exposita emittentia,  
rarissime terrestria et tunc loca humida colentia, fere  
in omnibus partibus similia, varie ab Auctoribus  
divisa ex fructificatione visibili vel invisibili, ex ejus  
organismis quæ extant, ex totius vegetabilis structura  
et colore. Sectiones a SPR: statutas, quæ cl: AGARDHII  
systemati admodum accedunt, in tot ordines distinctos  
convertendas duxi, ut facilius horum vegetabilium di-  
positio evadat. Cons: tamen inter alios AG: ipsum



in operibus supra citatis; LAMOURROUX Essai sur les *Thalassiphytes* Paris 1813.; LECOQ: dict: p. 324. sub vocab: *Hydrophytes* etc. etc.

## ORDO CCIV.

## PHYCOIDEÆ

(Spr: syst: IV. p. 310. = *Fucoideæ* Ag: syst: p. XXXV. = *Fucaceæ* Fries pl: hom: p. 326. = Bartl: ord: nat: p. 10. = *Thalassiphytes* *Symphysistecæ* nonnullæ Lamourx: l. c. = *Algarum fucoidearum* pars Mart: consp: regn: veg: p. 1.).

*Char: essentialis.*

- » *Frons* coriacea sub-olivacea. *Sporidia* nigra limbo
- » hyalino cincta filisque articulatis mixta in *receptac-*
- » *culis* peculiaribus vel frondi immersis. »

*Obs:* Ordo constans 14. generibus ex AG: et SPR: Vegetabilia marina basi scutata vel radiceformi affixa, pleraque magna. Pertinent ex MART: ad class: I. (*Ananthæ*), subclass: I. (*Pantacobryæ*), coh: I. (*Ananthæ frondosæ*), ord: 1. (*Algæ*), et partem fam: 3.<sup>æ</sup> (*Algæ fucoideæ*).

- I. *Fucus* Lin: syst: ed: Murr: n. 1205. excl: var: stirpib:
- = Spr: syst: n. 3386. = Lam: ill: t. 880.

- » *Frons* plana aphylla sub - dichotoma. *Receptac-*
- » turgida intus mucosa tuberculis sphaericis semini-

» feris fibrisque intertextis repleta. (Inter *Fucoideas*  
» *puras* AC: IV.). »

*Obs:* Genus jam numerosissimum (307. ex POIR: dict: V. p. 415. et seqq:), modo ad 12. stirpes coarctatum, ceteris ad varr: vel ad alia genera amandatis; ex illis magna pars europæa. Cons: inter alios insigne cl: BERTOLONII opusculum, cui titulus *Historia Fucorum maris Ligustici*, in am: ital: p. 280. ad 317., ubi concinnam descriptionem de omnibus exhibet, ac de pluribus novas tradit icones; dolendum posteriores Botanicos optimam Auctoris methodum immutasse, et varias familias ac genera constituisse nullo fere affinitatum respectu habito, et sola, sæpe inconspicua, fructificatione inspecta. Illa tamen sequi ex præsentis scientiæ statu coactus, numquam omittam summi nostri Italici synonymum ejusque præcipua monita.

\* 1. *F. vesiculosus* = L. sp: 1626. = Spr: syst: IV. 315. = Moris: s. 15. t. 8. f. 10. (In maribus plerisque. In mari *Nicæens*: et *Uneliens*: ALL: n. 2604.). Frons coriacea dichotomo-ramosa integerrima costata nigrescenti-viridis, receptacula terminalia sub-elliptica, abortientibus in vesicas abeuntibus. Variat multimode frondis et vesicularum figura; inter hasce varr: crescit ad mare *Nicæens*: *F. spiralis* L. sp: 1627. ALL: n. 2632., qui differt tantum fronde sæpe in spiram torta, et vesicularum defectu.

\* 2. *F. ceranoides* = L. sp: 1626. = Spr: syst: IV. 315. = Moris: l. c. f. 13. Stackh: ner: brit: p. 71. t. 13. (In maribus *Europæis*. In mari *Nicæens*: ALL: n. 2616.). Differt præsertim a priori statura generatim minori, colore minus intenso, frondium ra-

mis radiato-pinnatifidis, receptaculis acuminatis omnibus fructiferis.

\*? 3. *F. linearis* = Huds: angl: p. 467. n. 6. sec: All: n. 2613. (Ad rupes maris *Nicæens*: ALL: l. c.). Planta mihi ignota, nec a SPR: nec a DC. enumerata. *F. linearis* fl: dan: t. 351. a SPR: citatus pro syn: *F. distichi* L. videtur alia planta uti eruitur ex diagnosi Auctoris comparata cum synon: ALL: ad suum *F. linearem*.

\* 4. *F. serratus* = L. sp: 1626. = Spr: syst: IV. 316. = Reaum: mem: acad: Paris: 1772. t. 3. f. 1. 2. 3. 4. 5. 7. 9. (In maribus *Eur*: In mari *Nicæens*: et *Uneliens*: ALL: n. 2603.). Frons uti in *F. vesiculoso*, sed margine evidenter serrata et generatim valde latior, receptacula plana acutiuscula.

\* 5. *F. canaliculatus* = L. syst: 812. = Spr: syst: IV. 316. = Fl: dan: t. 214. (In maribus *Eur*: Ad rupes litoris *Nicæens*: ALL: n. 2605.). Præcedentibus humilior, frons ecostata uti in stirpibus seqq: dichotomo-ramosa linearis canaliculata integerrima nigrescens, receptacula ad apicem extremæ dichotomiæ turgida obtusa; hæc quandoque longiuscula evadunt et bifurca (*F. excisus* L. sp: 1627. MORIS: hist: III. s. 15. t. 8. f. 2.).

\* 6. *F. nodosus* = L. sp: 1628. = Spr: syst: IV. 316. = Reaum: mem: acad: Paris: 1772. t. 2. f. 3. Fl: dan: t. 146. (In maribus septentrionalib: Ad mare *Nicæens*: et *Uneliæ* ALL: n. 2606.). Frons basi sub-cylindrica demum compressiuscula hinc inde vesiculis nodosa ramis distichis obovatis integerrimis, receptacula lateralia stipitata pyriformia.



7. *F. Vermilara* = Bertol: fl: ital: ined: sec: Moris st: sard: III. p. 25. *Lamarkia Vermilara* Oliv: (*Sardin: ad scopulos in imo mare ins: S. Pietro* MORIS l. c.). Frons compressa dichotomo - ramosa villosa, receptacula terminalia obtusa. Confusus a SPR: cum *Codio tomentosus* Ag: (*Fucus tomentosus* HUDS:).

II. *FURCELLARIA* Ag: sp: alg: p. 101. = SPR: syst: n. 3385. = *Fuci* spec: L. (Inter *Fucoideas puras* Ag: V.).

» Frons filiformis aphylla dichotoma. Receptacula  
» siliquæformia terminalia. »

Obs: Genus constans unica specie seq:

\* 1. *F. lumbricalis* = Ag: l. c. = SPR: syst: IV. 315. = *Fucus lumbricalis* Gmel: fuc: p. 108. t. 6. f. 2. *Fucus fastigiatus* Gmel: fuc: p. 106. t. 6. f. 1. *Fucus furcellatus* HUDS: p. 589. (In mari *Baltico* et septentr: Ad rupes maris *Nicæens: ALL: n. 2614. sub F. fastigiato*). Vix spithamæus nigrescens ramosissimus ramis sub - fastigiatis acuminatis.

III. *CYSTOSIRA* Ag: sp: alg: III. = SPR: syst: n. 3387. = *Fuci* spec: L. et alior: (Inter *Fucoideas puras* Ag: l. c.).

» Frons in ramulos foliiformes et vesiculas conca-  
» tenatas abiens. Receptac: tuberculata loculosa, tu-  
» berculis pertusis capsulas filis mixtas continentibus. »

Obs: Genus ab Ag: creatum in dispendium *Fuci*, constans 40. circiter stirpibus per maria sparsis, nonnullis europæis.

\* 1. *C. ericoides* = Ag: l. c. = SPR: syst: IV. 316.

*Fucus ericoides* et *selaginoides* L. = *F. tamariscifolius* Stackh: ner: brit: p. 44. t. 11. *F. Erica marina* Gmel: *F. corniculatus* Esp: ic: fasc: I. p. 138. t. 69. (In mari *Atlantico* et *Mediterr*: In mari *Nicæens*: et *Unel*: ALL: n. 2608. sub *F. selaginoideo*, n. 2610. sub *F. abrotanoideo*, et n. 2619. sub *F. tamariscifolio*. *Genuæ* ab undis rejecta sub *Albaro* BERTOL: am: ital: p. 288. sub *F. Erica marina*. *Sardin*: ad scopulos marinos frequens MORIS st: sard: III. p. 25. sub *F. selaginoideo*). Facies *Ericæ*, frons ramosissima ramulis multifariam sub-divisis subulatis confertis rigidis, tubercula sub-globosa sparsa. Variat multimode.

\* 2. *C. granulata* = Ag: l. c. = Spr: syst: IV. 317. *Fucus granulatus* L. = Fl: dan: t. 591. *F. Abies* Bertol: in opusc: sc: di Bol: t. 11. p. 288. n. 2. t. 10. f. 2. a et am: ital: p. 219. et 287. t. 4. f. 2. a (In mari *Atlant*:, *Septentr*:, *Adriat*: et *Mediterr*: In rupibus marinis a *Pegli* et in mari *Nicæens*: BERTOL: am: ital: p. 287. Habeo rejectam ad litora maris prope *Monacum* et lectam a BELLARD: *Sardin*: ad rupes aliave in fundo maris frequens MORIS st: sard: IV. p. 24. sub *F. Abies*). Differt præsertim a priori vesiculis concatenatis lanceolatis ramos sæpius exasperantibus, ac tuberculis filiformibus elongatis. Variat modis indicatis a cl: BERTOL: ll. cc. Var:  $\beta$  *vesiculis nullis* distinctam speciem constituit ex AG: et SPR: sub *C. barbata* eadem ac *F. fœniculaceus* GMEL: non L.

\* 3. *C. concatenata* = Ag: l. c. = Spr: syst: IV. 317. *Fucus concatenatus* L. = Velley colour: figur: of marin: plant: c. ic: *F. fimbriatus* Desf: atl: II. p.

423. t. 259. ? (In mari *Atlant:* et *Mediterr:* In maris aquis prope *Albengam* Re app: III. p. 18. *Genuæ* sub pharo e mari rejectam et a *Pegli* in *Ligur:* occid: BERTOL: am: ital: p. 286. sub *Fuco*. *Sardin:* in mari *S. Elia* ad scopulos MORIS st: sard: III. p. 24. sub *Fuco*). Frons teretiuscula piunato-ramosa, rami filiformes in ramulos tenuissimos irregulariter divisi vesiculosi, vesiculæ concatenatæ lanceolatæ, receptacula sparsa oblonga. Habeo a cl: MARTIO e mari *Adriatico* sub nomine *C. Hoppii*. Ico DESF: de *F. fimbriato*, quem cl: BERTOL: citat tamquam synon: *F. concatenati*, toto cœlo differt.

\* 4. *C. discors* = Ag: l. c. = Spr: syst: IV. 317. *Fucus discors* et *sceniculaceus* L. non Gmel: = Engl: bot: t. 2131. (In mari *Atlant:* et *Mediterr:* In rupibus litoris maris *Nicæens:* et *Uneliæ* ALL: n. 2609. sub *Fuco sceniculaceo* excl: syn: GMEL: In *Lunæ* portu, a *Sestri di Levante* ac *Genuæ* sub *Albaro* BERTOL: am: ital: p. 285. sub *Fuco*. *Sardin:* ad scopulos marinos *S. Elia* etc. frequens MORIS st: sard: III. p. 24.). Vix differt a priori præsertim vesiculis sub-solitariis, receptaculis linearî-lanceolatis.

\* 5. *C. siliquosa* = Ag: l. c. = Spr: syst: IV. 317. *Fucus siliquosus* L. = Gmel: fuc: p. 81. t. 2. B. Fl: dan: t. 106. (In maribus *Europæis* fere omnibus. Ad rupes litoris *Nicæens:* ALL: n. 2607. sub *Fuco*). Frons compressa latiuscula ramosa ramis plerumque vesiculis siliquæformibus terminatis, receptacula lanceolata; tota planta nigrescens. Variat statura undique duplo minori (*F. siliculosus* GMEL:).



IV. SARGASSUM Ag: sp: alg: I. = Spr: syst: n. 3389. =  
*Fuci* sp: L. et alior: (Inter *Fucoideas puras* Ag: l. c.).

» *Frons* foliata foliis petiolatis sub-costatis vesiculis  
 » axillaribus pedunculatis. *Receptac*: tuberculata locu-  
 » losa tuberculis pertusis capsulas fibris nullis mixtas  
 » continentibus. »

*Obs*: Genus pariter in *Fuci* dispendium statutum,  
 constans 60. circiter stirpibus in maribus *Indiarum*  
 et australibus præsertim nascentibus, perpaucis eu-  
 ropæis. *Frons foliata* nonnisi improprie dicitur ad  
 indicandum plantarum habitum sc: fronde divisa in  
 expansiones foliiformes; expansiones istæ modo dis-  
 tinctæ sunt indivisæ, vel serratæ, dentatæ, pinnati-  
 fidæ etc., modo frons ipsa tota foliacea videtur; re-  
 ceptacula autem, evidentissima in hoc genere, nunc  
 axillaria, nunc terminalia adparent; ex quibus optimæ  
 generis sectiones ac sub-divisiones.

\* 1. *S. vulgare* = Ag: l. c. = Spr: syst: IV. 320.  
 = *Fucus natans* Turn: hist: fuc: I. p. 99. t. 46. non L.  
 Sub *F. Sargasso* Gm: fuc: 96. Lob: ic: II. t. 256.  
 f. 2. (In maribus plerisque australiorib: In mari *Ni-*  
*cæens*: ALL: n. 2611. sub *F. natante*). *Frons* sub-  
 cylindrica fusca basi nuda subinde ramosa, rami an-  
 gulosi foliis sparsis lanceolatis plus minus latis linea-  
 ribusque serratis, vesiculæ sparsæ globosæ breviter  
 depresso - pedunculatæ muticæ, receptacula axillaria  
 solitaria vel sub - racemosa cylindræa. Variat foliis  
 angustioribus (*F. salicifolius* GMEL:), fronde ramosis-  
 sima (*F. ramosissimus* LAM:) etc.

\* 2. *S. bacciferum* = Ag: l. c. = Spr: syst: IV. 320. *Fucus natans* L. sp: 1628. = Esp: fuc: p. 49. t. 23. (Cum priori. Habeo ex BELLARD: lectum in mari *Nicæens*:). Vix differt a priori fronde tereti ramosissima, foliis omnibus linearibus, vesiculis mucronatis.

\* 3. *S. linifolium* = Ag: l. c. = Spr: syst: IV. 322. *Fucus acinarius* L. sp: 1628. = Esp: fuc: p. 130. t. 65. 66. *F. salicifolius* Bertol: am: ital: p. 283. t. 4. f. 1. a b (In mari *Mediterr*: In mari *Nicæens*: et *Uneliæ* ALL: n. 2612. sub *F. acinario*. In *Lunæ* portu prope fontem medio mari existentem in viciniis *di Marola*; occurrit quoque a *Sestri di Levante* BERTOL: l. c. p. 284.). Frons teretiuscula filiformis elongata muricata, folia alterna vel sparsa sub-sessilia linearia sub-integerrima, vesiculæ sphaericæ pedunculatæ muticæ, receptacula axillaria cylindrica elongata bifurca. Variat vesicularum numero et magnitudine, tum foliis lanceolatis serrulatis (*Fucus salicifolius* BERTOL: l. c. p. 283.), vel linearibus elongatis (*F. salicifolius* β BERTOL: l. c.). Binas species admittit Spr: Cons: BERTOL: l. c. et p. 220. nn. 30. 31. 32. et 33.

V. ZONARIA Ag: sp: alg: VIII. = Spr: syst: n. 3391. = *Fuci*, *Ulvæ*, *Laminariæ*, et *Dictyotæ* spec: nonnullæ quorund: (Inter *Ulvoideo-fucoideas* Ag: l. c.).

» Frons sub-flabelliformis membranacea parallelo-  
» fibrosa lineis fructiferis plerumque transversis. Cap-  
» sulæ in soris acervatæ.

Obs: Genus habitu a *Fuco* distinctum, ad *Ulvam* L. magis accedens, nunc constans 15. circiter stir-

pibus per maria sparsis, quarum media pars europæa.

1. *Z. plantaginea* = Ag: l. c. Sub *Ulva* Roth: *U. plantaginifolia* Wulf: aliique (In mari *Septentr:* et *Adriat:* *Sardin:* in intern: port: *Caralis* ad parietes MORIS st: sard: III. p. 26. sub *Ulva*). Frons viridis integra tenerrima late lanceolata vel rotundata obtusa basi attenuata gregaria. Variat fronde denticulata, tenuiori etc. Huc pertinet sec: SPR: *Z. tenuissima* et *Laminaria debilis* Ag: ~~l. c. 1804~~

\* 2. *Z. Pavonia* = Ag: l. c. = Spr: syst: IV. p. 326. Sub *Ulva* L. syst: nat: ed: 12. tom. II. p. 719. = Engl: bot: t. 1276. Sub *Fuco* L. sp: 1630. et Bertol: am: ital: p. 310. Sub *Dictyota* Lamourx: (In mari *Atlant:*, *Mediterr:* et *Indico*. In mari *Nicaëns:* ALL: n. 2634. sub *Ulva*. Ubique in mari *Ligustico* BERTOL: l. c. In mari *Sardoo* frequentissima MORIS st: sard: III. p. 25. sub *Fuco*). Frons membranacea flabelliformis ex una parte zonis concentricis sordide flavidis, ex altera sulcis zonisque albidiusculis notata.

\* 3. *Z. squamaria* = Ag: l. c. = Spr: syst: IV. 326. = Sub *Fuco* Gmel: fuc: 171. t. 20. f. 1. Bertol: am: ital: p. 311. Sub *Ulva* DC. *Dictyota squamata* Lamourx: (In mari *Mediterr:* et *Atlant:* In mari *Nicaëns:* ex BALB: el: p. 8. sub *Ulva*. In litore inter *Pegli* et *Voltri* BERTOL: l. c. *Sardin:* ad scopulos et in litore rejecta ab undis MORIS st: sard: IV. p. 25. sub *Fuco*). Frons coriacea reniformi-rotundata sublobata crispo-undulata subtus tomentosa plus minus diaphana zonis concoloribus. Facies *Lichenis*.

\* 4. *Z. atomaria* = Ag: l. c. = Spr: syst: IV. 327. = Sub *Ulva* Woodw: engl: bot: t. 419. sub



*Fuco atomario* var:  $\beta$ . Bertol: am: ital: p. 313. (In mari Atlant: et Mediterr: In Lunæ portu et Genuæ in scopulis sub *Albaro* non infrequens BERTOL: l. c.). Frons membranacea ex viridi sordide flava linearis sub - palmato - multifida laciniis serrulatis zonis per paria approximatis. An planta BERTOL: , longe minor quam *Z. atomaria*, hujus tantum var: vel species distincta? Illam non vidi.

\* 5. *Z. flava* = Ag: l. c. = Spr: syst: IV. 327. = *Fucus Tournesfortii* Lamourx: diss: fasc: I. p. 44. t. 26. f. 1. Bertol: am: ital: p. 312. t. VI. f. 1. (In mari Atlant: et Mediterr: In Lunæ portu rejecta ab undis ad litora di *S. Terenzo* BERTOL: l. c.). Frons stipitata ramosa fulva, rami abeuntes in laminas foliaceas apice multifido-laciniatas zonis paucis transversis arcuatis notatas.

VI. HALISERIS Ag: sp: alg: X. = Spr: syst: n. 3392. = *Dictyopteridis*, *Zonariæ*, *Fuci*, *Ulvæ*, et *Dictyotæ* spec: nonnullæ quorund: (Inter *Ulvoideas fucoideas* Ag: l. c.).

» Frons plana membranacea sæpius costata. Cap-  
» sulæ in soris acervatæ (maculæ capsuliferæ sparsæ  
» BERTOL:).

Obs: Genus facie a *Zonaria* vix distinctum, constans 9-10. stirpibus, quarum 2. tantum europææ.

\* 1. *H. polypodioides* = Ag: l. c. = Spr: syst: IV. 328. = Sub *Fuco* Desf: Lamourx: diss: fasc: I. p. 32. t. 24. f. 1. 2. Bertol: am: ital: p. 232. 313. *F. membranaceus* Stack:, Turn: et Engl: bot: t. 1758. Sub *Ulva* DC. fl: fr: n. 32. Sub *Dictyopteride* Lamourx:

ann: du Mus: (In mari *Atlant:* et *Mediterr:* Copiosa in *Lunæ* portu, *Genuæ* sub pharo majori et a *Pegli* BERTOL: l. c. p. 314. *Sardin:* ad scopulos *Isola piana*, *S. Elia* MORIS st: sard: III. p. 25.). Frons stipitiformis filiformis inferne nuda superne expansa in alam olivaceam lanceolatam integram vel laceram sub-dichotomam, maculæ capsuliferæ prope costam frondis crebriores.

\* 2. *H. dichotoma* = Spr: syst: IV. 328. = Sub *Ulva* Lightf: fl: scot: II. p. 975. t. 34. = Engl: bot: t. 774. f. 1. aliique. Sub *Dictyota* Lamourx: ann: du Mus: Sub *Zonaria* Ag: Sub *Fuco* Bertol: am: ital: p. 314. *F. zosteroides* Lamourx: diss: fasc: I. p. 25. t. 22. f. 3. et t. 23. f. 1. (In mari *Atlant:* et *Mediterr:* In maris aquis prope *Albengam* RE app: III. p. 18. Copiose *Genuæ* sub *Albaro* ad *S. Julianum*, minus copiose in *Lunæ* portu a *S. Terenzo* BERTOL: l. c. *Sardin:* ad scopulos in mari *Isola piana*, *Carlo forte* etc. MORIS st: sard: III. p. 24. sub *Fuco*). Frons ecostata virens tenuis plana lineari-lanceolata dichotoma laciniis plus minus profunde 2-sidis vel emarginatis, maculæ capsuliferæ oblongæ sparsæ vel per series longitudinales dispositæ. Variat  $\beta$  fronde angusta brevi (Engl: bot: t. 774. f. 2.);  $\alpha$  angusta elongata (Esp: fuc: I. p. 91. t. 44.);  $\delta$  angusta superne capillacea ramosa. Var:  $\alpha$  venit apud SPR: sub *Zonaria Fasciola* eadem ac *Fucus Fasciola* ROTH: eat: I. p. 146. t. 7. f. 1. Omnes yarr: istas locis indicatis inveniri tradit BERTOL:

VII. SCYTOSIPHON Ag: spec: alg: XIII. = Spr: syst: n. 3394. = *Fuci*, *Chordæ*, *Ulvæ*, *Conservæ*, et *Ceramii* spec: nonnullæ quorund: (Inter *Conservoideo-fucoideas* Ag:).

» *Frons* tubulosa filiformis olivacea, sporidiis filiformibus superficiem exteriori frondis constituentibus. »

*Obs:* Genus constans 3. stirpibus jam ad *Fucum* spectantibus.

\*? 1. *S. fœniculaceus* = Spr: syst: IV. 328. ex Lyngb: = Sub *Conserva* Huds: fl: angl: 479. = Dill: musc: 16. t. 2. f. 8. (In mari *Baltico* et *Septentr:* In rupibus maris *Nicæens:* ALL: n. 2644. sub *Conserva*). *Frons* ramosa ramis flexuosis setaceo-capillaribus. Plantam non vidi; an eadem ac *Polysiphonia filamentosa* SPR: ? Vid: infra sub hoc genere n. 3.

VIII. SPOROCHNUS Ag: spec: alg: XII. = Spr: syst: n. 3395. = *Fuci*, *Gærtneræ*, *Desmarestiæ*, *Desmiæ*, *Chondriæ*, *Gigartinae*, *Conservæ*, *Chordariæ*, *Ulvæ*, et *Zonariæ* spec: nonnullæ quorund: (Inter *Conservoideo-fucoideas* Ag:).

» *Frons* filiformis vel plana. *Receptac:* minuta e corpore clavæformibus articulatis concentricis penicillis coronata. »

*Obs:* Genus receptaculorum structura satis distinctum, constans 15. circiter stirpibus, quarum vix tertia pars europæa.

\* 1. *Sp. aculeatus* = Ag: l. c. = Spr: syst: IV. 329. Sub *Fuco* L. sp: 1161. = Fl: dan: t. 355. *F.*



*mucoïdes* Gmel: Wulf.; *contortus* Esp.; *virgatus* Gunner: Sub *Desmarestia* Lamourx: Sub *Desmia* Lyngb: (In mari *Atlant:* et *Septentr:* In mari *Nicæens:* et *Uneliæ* ALL: n. 2620. sub *Fuco muscoïdeo*). Frons linearis fusca sub-cornea compressiuscula ramosa ramis elongatis aculeato-denticulatis.

IX. CHORDARIA Ag: spec: alg: XIV. = Spr: syst: n. 3396. = *Ceramii*, *Fuci*, *Conservæ*, *Gigartinae*, *Rivulariæ*, et *Halymeniæ* spec: nonnullæ quorund: (Inter *Conservoideo-fucoideas* Ag:).

» Frons filiformis cartilaginea e filis clavatis concentricis constituta. »

Obs: Genus constans ex SPR: 4. stirpibus obscuris quoad genus.

\* 1. *Ch: Nematium* = Ag: l. c. = Spr: syst: IV. 330. = Sub *Fuco* Bertol: in opusc: scient: di Bologn: tom. II. p. 292. t. 11. f. 9. et am: ital: p. 300. t. V. f. 9. (In mari *Ligust:* præsertim in *Lunæ* portus scopulis a *S. Terenzo* BERTOL: l. c. *Sardin:* ad rupes maris *Geremeas* ad maris pacati superficiem MORIS: sard: III. p. 24. sub *Fuco*). Frons simplicissima rarius parce ramosa fulva vel luride virens teres pendula flagelliformis diaphana intus farcta.

\* 2. *Ch: Opuntia* = Spr: syst: IV. 330. = *Fucus Sertolata* Bertol: am: ital: p. 224. et 316. = *Sertolata* Imp: hist: nat: ed: Nap: p. 748. c. ic: *Rivularia Opuntia* Engl: bot: t. 1868.? (In mari *Atlant:* In mari *Ligust:* præsertim in *Lunæ* portu scopulis demersis prope arcem *S. Theresiæ* et in litore inter *Pegli* et *Foltri* a mari rejecta BERTOL: l. c. p. 316.

317. *Sardin:* ad scopulos demersos *Isola picana, la Facca, S. Elia* MORIS st: sard: III. p. 25. sub *Fuco Sertolata*). Frons plana sub - coriacea viridis crassa articulata articulis sub-rotundis altero supra alterum interposito uti in *Cacto Opuntia*, filis intermixtis reticulatis. Ex diagnosi SPR: comparata cum descr: BERTOL: nullum dubium, *Ch: Opuntiam* pertinere ad plantam BERTOL: etsi synon: omissam a SPR: Habeo ex *Sardin:*

X. LEMANEA Spr: syst: n. 3397. ex Bory = *Confervæ*, *Polyspermæ*, *Chantrantia*, *Nodulariæ* spec: nonnullæ quorund: (Inter *Confervoideas* Ag: XLIV.).

» Frons filiformis torulosa tubulosa. *Catenæ* sporarum penicillatæ moniliformes interiori fili paginæ affixæ. »

*Obs:* Genus constans ex SPR: stirpibus 5. in fluviis europæis crescentibus.

\* 1. *L. fluviatilis* = Spr: syst: IV. 330. ex Ag: = Sub *Conferva* L. sp: 1635. = Dill: musc: f. 7. t. 47. Sub *Polysperma* Vauch: conf: p. 99. t. 10. f. 1. 2. 3. Sub *Chantrantia* DC. fl: fr: n. 118. (In fluviis *Eur: Pedem:* in flumine *Pisii* BALB: misc: alt: p. 37. sub *Conferva*. In aquis rapidis præsertim ad molitri-  
nas sæpe vidit BIROLI fl: acon: II. p. 206.). Fili elongati simplices raro ramulosi fusci demum nigrescentes articulis papillosis remotiusculis utrinque inflatis.

2. *L. torulosa* = Spr: syst: IV. 330. ex Ag: Sub *Conferva* Roth: Sub *Chantrantia* DC. (In fluviis *Eur:* Juxta rivulos in montibus *Sardin:* centralis MORIS st:

sard: III. p. 25. ). Differt a priori statura generatim minori, filis incurvis, articulis medio inflatis.

Obs: geographica circa *Phycoideas*.

*Phycoideæ* per maria sparsæ circiter . . . 190

*Phycoideæ* in mari Nicœens: et Ligustico.

<i>Fucus</i>	6
<i>Furcellaria</i>	1
<i>Cystosita</i>	5
<i>Sargassum</i>	3
<i>Zonaria</i>	5
<i>Halliseris</i>	2
<i>Scytosiphon</i>	1
<i>Sporachnus</i>	1
<i>Chordaria</i>	2
<i>Lemanæa</i>	1
	<u>27</u>



## ORDO: CCV.

## FLORIDEÆ

(Ag: syst: p. XXXIII. = Fries pl: hom:  
p. 330. = Reich: consp: I. p. 27. = Barth:  
ord: nat: p. 10. = *Floridæ* Spr: syst: IV.  
p. 312. = *Algarum fucoidearum* pars Mart:  
consp: regn: veget: p. 1.)

*Char: essentialis.*

» *Frons* sub-radicata sub-coriacea filiformis vel  
» plana continua rubescens. *Sporidia* in capsulis in-  
» clusa vel in soris aggregata. »

*Obs:* Ordo constans 15. generibus ex Spr: Vegeta-  
bilia marina (excepto *Amphicornio*) habitu *Phycoi-*  
*dearum*.

I. WARMSKIOLDIA Spr: syst: n. 3399. = *Fuci*, *Delesse-*  
*riæ*, *Ulvæ* et *Plocamii* spec: nonnullæ quorund:

» *Frons* membranacea. *Fructus* duplex. *Caps:* et  
» *sori* sporidiis ternis. »

*Obs:* Genus in dispendium *Fuci* præsertim crea-  
tum, fructificatione tamen habituque valde recedens,  
nunc constans 18-20. stirpibus, quarum media cir-  
citer pars maria europæa inhabitat.

1. *W. Hypoglossum* = Spr: syst: IV. 331. Sub  
*Fuco* Wood: Sub *Delesseria* Lamourx: (In mari  
*Atlant:* *Sardin:* in litore Carlo forte rejecta ab undis

MORIS st: sard: III. p. 24. sub *Fuco*). Plantam non vidi. Ex DC. syn: fl: gall: p. 5. n. 60. sub *Fuco* est caulis (frons) alatus ramosus, folia lineari-lanceolata plana integerrima prolifera, tuberculi fructiferi laterales:

\* 2. *W. ocellata* = Spr: syst: IV. 331. = *Fucus ocellatus* et *granateus* Lamourx: diss: fasc: I. p. 65. t. 32. f. 1. 2. 3. 4. et p. 68. t. 33. f. 3. 4. = *F. ocellatus* Bertol: am: ital: p. 293. Sub *Ulva* DC. fl: fr: n. 26. (In mari *Atlant:* et *Mediterr:* In *Lunæ* portu BERTOL: l. c. *Sardin:* in litore sinus *Caralitani* ab undis rejecta MORIS st: sard: III. p. 25. sub *Fuco*). Frons papyracea tenuissima læte rosea plus minus late linearis ramosa avenia diaphana ramis seu segmentis obtusis, sori ovati sparsi intensius rubri capsulis punctiformibus referti. Species pulcherrima.

\* ? 3. *W. lacera* = Spr: syst: IV. 332. = *Fucus laceratus* Gmel: fuc: 179. t. 21. f. 4. = *F. bifidus* x Bertol: am: ital: p. 293. t. 5. f. 6. non Huds: ? (In mari *Atlant:*, *Septentr:* et *Mediterr:* In mari *Ligust:* BERTOL: l. c.). Planta mihi dubia; specim: mea quadrant cum diagnosi SPR: et ic: GMEL:, nec cum descr: et ic: BERTOL: quæ exhibet plantam equidem habitum nostræ referentem sed multoties minorem ac tenuiorem ramulis recurvis in margine huc illuc instructam. Ceterum, monente DC. fl: fr: n. 63., stirps hæc valde polymorpha. *F. bifidus* Huds: pertinet ad *Sphærococcum*.

\* 4. *W. Plocamium* = Spr: syst: IV. 332. = Sub *Fuco* Gmel: fuc: p. 153. t. 16. f. 1. a = *F. coccineus* Turñ: hist: fuc: I. p. 130. n. et t. 59. Bertol:

am: ital: p. 305. aliique. *Plocamium vulgare* Lamourx:  
 (In maribus plerisque. In mari *Ligust*: BERTOL: l. c.  
*Sardin*: ad scopulos ins: *S. Pietro*, *la Vacca* MORIS  
 st: sard: III. p. 24. sub *F. coccineo*). Frons linearis  
 compressiuscula diaphana plus minus saturate coccinea  
 ramosissima seu in plantum flabelliforme tenuissime  
 supra-decomposita, capsulæ globosæ sparsæ sub-sessiles  
 demum atro-rubentes.

II. HALYMENIA Ag: sp: alg: XIX. = Spr: syst: n. 3402.  
 = *Fuci* et *Ulwæ* spec: nonnullæ quorund: (Inter  
*Ulvoideo-florideas* Ag:).

» Frons plana vel tubulosa sub-membranacea. Tu-  
 » bercula punctiformia laminæ frondis sub-immersa. »  
 Obs: Genus constans 9-10. stirpibus præsertim ex  
*Fuco* diremptis, quarum media pars circiter maria  
 europæa incolit.

\* 1. *H. palmata* = Ag: l. c. = Spr: syst: IV.  
 333. Sub *Fuco* L. sp: 1630. = Lighf: scol: 933.  
 t. 27. Sub *Ulva* DC. fl: fr: n. 27. (Im mari *Atlant*:  
 et *Septentr*: Ad rupes maris *Nicæens*: ALL: n. 2633.  
 sub *Fuco*. *Sardin*: ad rupes in mari aperto scopuli  
*la Vacca* MORIS st: sard: III. p. 25. sub *Fuco*). Frons  
 plana dilatata membranaceo-pellucida obscure rubra  
 palmata laciniis lanceolatis margine integris basi ple-  
 rumque 2-fidis. In insulis septentrionalibus alimentum  
 cum *H. eduli* pauperibus præstat.

2. *H. furcellata* = Ag: l. c. Sub *Ulva* Turn: (In  
 mari *Atlant*: *Sardin*: in litore circa Cæmocomium  
 Caralitanum rejecta ab undis MORIS st: sard: III. p.  
 26. sub *Ulva*). Plantam non vidi.



III. GRATELOUPIA Ag: sp: alg: XX. = Spr: syst: n. 2403.  
= *Fuci* sp: L. Turn: (Inter *Fucoideas genuinas* Ag:).

» *Frons* plana vel filiformis ramentacea. *Tubercula*  
» in ramentis aggregata pertusa, sporidiis ellipticis. »

*Obs:* Genus constans 2. stirpibus tantum a *Fuco*  
diremtis, quarum altera ex maribus *Afr:* austr:, al-  
tera ex *Mediterr:*

\* 1. *Gr: filicina* = Ag: l. c. = Spr: syst: IV. 334.  
= Sub *Fuco* Gmel: fuc: t. 18. f. 3. Wulf: in Jacq:  
coll: III. p. 157. t. 15. f. 2. (In mari *Mediterr:* et  
*Rubro. Sardin:* in mari sinus *Cataritani* ad saxa Mo-  
RIS st: sard: III. p. 24. sub *Fuco*. Ex mari *Nicaëns:*  
retulit BELLARD: et mihi communicavit). *Frons* linea-  
ris cartilaginea sub-gelatinosa viridiuscula planiuscula  
alato-ramosissima ramis distichis tenuissime ramulosis.

IV. SPHÆROCOCCUS Strackh: = Ag: spec: alg: XXII. =  
Spr: syst: n. 3405. = *Fuci*, *Ulvæ*, *Chondri*, *Ce-*  
*ramii*, *Gigartinae*, *Desmiae*, *Gelidii*, *Plocariae*, et  
*Scytosiphonis* spec: nonnullæ quorund: (Inter *Flo-*  
*rideas genuinas* Ag: ).

» *Frons* sub - coriacea filiformis vel plana divisa.  
» *Caps:* sphæricæ, nucleo sporidiorum rotundorum glo-  
» boso. »

*Obs:* Genus creatum a STACKH: in dispendium præ-  
cipue *Fuci*, nunc constans ex SPR: stirpibus 72. ex  
fronde plana vel filiformi, costata vel ecostata divisis,  
inter quas permultæ europææ.

\* 1. *Sph: Lactuca* = Ag: l. c. = Spr: syst: IV.  
334. = *Fucus Lomation* Bertol: am. ital: p. 220. et

289. t. IV. f. 3. (In mari *Atlant:* et *Mediterr:* In mari *Ligustico* ubi adhæret saxis et conchis BERTOL: l. c. p. 289.). Frons crassiuscula inferne teres subinde compressiuscula ramosa ex rubro pallide virens, rami in lacinias seu ramenta foliosa sub-orbicularia integra vel lobata avenia abeuntes, fructificatio minutissima sparsa in ramentorum superficie. Habeo etiam ex mari *Adriatico* a cl: NACCARI.

\* 2. *Sph: nervosus* = Ag: l. c. = Spr: syst: IV. 334. = Sub *Fuco* Turn: fuc: I. p. 92. t. 43. Sub *Delesseria* Lamourx: (In mari *Atlant:*, *Mediterr:* et *Nigro. Ligur:* in *Lunæ* portu et *Genuæ* sub *Albaro* in rupibus demersis prope oras maris, in litoribus *di Pegli* et *Voltri* ab undis rejectus BERTOL: am: ital: p. 290. sub *Fuco*. *Sardin:* in antris marinis *il Vitello*, *Cala-Vinagra* MORIS st: sard: III. p. 24.). Frons nervosa sc: ex fulcro tereti mox compresso in laminas seu folia diaphana rubentia plus minus linearia margine crispo-undulata per totam longitudinem nervo medio evidentissimo donata abeunte, fructificatio marginalis sub-stipitata frondi concolor.

3. *Sph: bifidus* = Ag: l. c. *Fucus bifidus* Huds: *F. bifidus*  $\beta$  Bertol: (In mari *Atlant:* *Sardin:* ad litus maris *Cagliari* rejectus ab undis MORIS st: sard: III. p. 24. Habeo ex mari *Adriat:* a NACCARI). Stirps mihi dubia. Vid: supra *Warmskioldiam laceram* n. 3. et cons: NACCARI fl: ven: VI. p. 82. 83.

\* 4. *Sph: membranifolius* = Ag: l. c. = Spr: syst: IV. 335. Sub *Fuco* Esp: Turn: = *F. pseudoceranoi-*  
*des* Gmel: fuc: p. 119. t. 7. f. 4. (In mari *Atlant:*, *Septentr:* et *Baltico*. Ad rupes maris *Nicæens:* ALL:

n. 2618. sub *Fuco*). Frons membranacea rubescens teretiuscula ramosa ramis multoties divisis in laminas planiusculas bifidas palmatasve abeuntibus, fructificatio stipitata. Variat colore ex atro ad roscum, laciniis plus minus latis. Habeo typum cum varr: a ell: RIZZO et PERRET sub nomine *Delesseriæ membranifoliæ*, et *Fuci pseudoceranoidei*.

\* 5. *Sph: verruculosus* = Ag: l. c. = Spr: syst: IV. 337. = Sub *Fuco* Bertol: am: ital: p. 291. t. V. f. 4. a b (In mari *Mediterr: Genuæ* in *Lunæ* portu ad rupes violentiori æstu maris percussas BERTOL: l. c. In maris aquis prope *Albengam* RE app: III. p. 18. *Sardin:* in mari *S. Cattarina Pittinuri* ad scopulos demissos MORIS st: sard: III. p. 25.). Frons plana cartilaginea lutescens tenacissima superne inæqualiter palmato-multifida margine repando-undulata ramulosa ciliata, fructificatio globulosa undique sparsa creberrima frondi concolor vel parum saturatior.

\* 6. *Sph: Heredia* = Ag: l. c. = Spr: syst: IV. 336. = *Fucus Cypellon* Bertol: am: ital: p. 292. t. V. f. 5. *F. laciniatus* Balb: el: p. 5. non Turn: (In mari *Atlant:* et *Mediterr:* Occurrit in *Lunæ* portu scopulis demersis BERTOL: l. c.). Frons basi filiformis subinde compressa demum flabelliformi-ramosa pallide rubens diaphana avenia ramis multoties divisis divisionibus ultimis brevissimis bifurcis, ramenta cylindræa in frondis bifurcationibus aut in ejus superficie; an sori, an capsulæ, an gongyli? De verrucis echinatis pedicellatis, quas memorat SPR:, silet BERTOL:, et illæ non adparent, nec in ejus ic: nec in specim: meis.



\* 7. *Sph: Theedii* = Ag: l. c. = Spr: syst: IV. 337. = Sub *Fuco* Turn: fuc: IV. p. 25. 26. t. 208. et Bertol: am: ital: p. 232. 304. Sub *Ceramio* Roth: cat: III. p. 108. t. 4. f. a b c. Sub *Gigartina* Lamourx: (Ad litora *Lusitan:* Occurrit in *Lunæ* portu sed rarus BERTOL: l. c. p. 304. *Sardin:* ad scopulos marinos *il Vitello* MORIS st: sard: III. p. 25.). Frons compressiuscula cartilaginea diaphana luride viridis 2-3-pinnata vel decomposita ramulis pinnularum subulatis, fructificatio globosa sessilis lateralis frondi concolor.

\* 8. *Sph: corneus* = Ag: l. c. = Spr: syst: IV. 337. Sub *Fuco* Huds: fl: angl: p. 474. n. 38. = Gmel: fuc: p. 144. t. 14. f. 3. *F. capillaceus* Gmel: l. c. t. 15. f. 1. et Bertol: am: ital: p. 297. (In mari *Atlant:*, *Mediterr:* et *Rubro*. Ad rupes maris *Nicæens:* ALL: n. 2626. sub *Fuco*. Frequens in *Lunæ* portu, *Genuæ* in scopulis sub pharo vel in litoribus rejectus ab undis BERTOL: l. c. *Sardin:* ad scopulos maritimos *Isola piana*, *Cala Vinagra* etc. MORIS st: sard: III. p. 24.). Priori valde affinis, sed differt colore ex virente purpureo vel luteo, ramulis pinnularum obtusis, fructificatione elliptica pedicellata terminali. Planta nostra est verus *Fucus capillaceus* GMEL:, quem cl: BERTOL: omnino diversum existimat a *F. corneo* HUDS: quemque huc trahunt SPR: alii que tamquam solam var: (*Sph: corneus* ♂ *capillaceus* AG:).

\* 9. *Sph: hypnoides* = Nob: = *Fucus hypnoides* Bertol: am: ital: p. 296. non Turn: = *F. spinosus* Gmel: fuc: t. 18. f. 3.? *Geladium corneum* Lamourx: Vol. VI.

non Steud: (In mari *Mediterr*: Copiosus in antro orient: ins: *Palmaria* portus *Lunæ* obtegens scopulos, *Clavari* in scopulis loco dicto *Gruppo del Sale* BERTOL: l. c.). Sæpe confusus cum priori, a quo differt, monente BERTOL:, habitu minori, fronde reptante, substantia duriori, pinnis pinnulisque angustioribus utrinque decrescentibus, ramulis brevioribus subulatis. Ceterum stirps pro synon: valde confusa uti liquet ex STEUD: p. 182.

\* 10. *Sph: coronopifolius* = Ag: l. c. = Spr: syst: IV. 337. = Sub *Fuco* Turn: fuc: II. p. 133. t. 122. et Bertol: am: ital: p. 298. aliique. Sub *Gelidio* Lamourx: (In mari *Atlant*:, *Septentr*:, et *Mediterr*: Frequens in scopulis demersis portus *Lunæ*, tum etiam in litore inter *Pegli* et *Voltri* rejectus ab undis BERTOL: l. c. *Sardin*: in antris scopuli *la Vacca*, *Isola piana* MORIS st: sard: III. p. 24.). Frons linearis compressa cartilaginea diaphana læte coccinea decomposita ramis omnibus distichis ramulis ultimis brevissimis acutissimis 3-4-seriatim dispositis, fructificatio ad apicem ramulorum globoso-rostellata.

\*? 11. *Sph: gigartinus* = Ag: l. c. = Spr: syst: IV. 338. = Sub *Fuco* Stackn: ner: brit: app: t. C n. 4. *F. pistillatus* Gmel: fuc: p. 159. t. 18. f. 1.? (In mari *Atlant*: et *Septentr*: Habeo a BELLARD: lectum in mari *Villæfrancæ*). Frons planiuscula linearis cartilaginea diaphana rubescens ramosissima, rami multoties dichotomi erectiusculi, ramuli filiformes brevissimi, fructificatio ad apicem ramulorum globosa sessilis nuda. Planta mihi valde dubia. Cl: BELLARD: in scheda citat ic: OED: fl: dan: t. 394. Hæc

spectat sec: SPR: ad *Fucum cristatum* L. (*Sphærococcus* AG: SPR:), sed fructificatio in nostra *terminalis* nec *marginalis*; insuper sub hisce nominibus enumeratam non video a Botanicis italicis.

\* 12. *Sph: cartilagineus* = AG: l. c. = SPR: syst: IV. 338. Sub *Fuco* L. sp: 1630. = TURN: fuc: II. p. 138. t. 124. aliique. *Gelidium versicolor* et *concatenatum* Lamourx: (In mari *Atlant*., *Indico*, *C. B. S.* In *Mediterr*: ad *Ragusam* BERTOL: am: ital: p. 221. et 231. Ad rupes maris *Nicæens*: ALL: n. 2630. *Sardin*: in mari *S. Elia*, *Porto-scuso* ad rupes MORIS st: sard: III. p. 24. omnes sub *Fuco*). Frons filiformis compressiuscula cartilaginea coccinea statim ramosissima ramis tenuissime supra-decompositis ramulis ultimis apice fructiferis; stirps humilis pulchella.

\* 13. *Sph: confervoides* = AG: l. c. = SPR: syst: IV. 338. Sub *Fuco* L. sp: 1629. = TURN: fuc: II. p. 30. t. 84. Engl: bot: t. 1668. aliique. *F. verrucosus* et *longissimus* Stackn: *F. procerrimus*, *flagellaris* et *uniformis* Esp: Sub *Gigartina* Lamourx: (In mari *Atlant*: et *Septentr*: In mari *Nicæens*: et *Uneliæ* ALL: n. 2627. sub *F. confervoides*, 2623. sub *F. longissimo* et 2622. sub *F. verrucoso*. In mari *Ligustico* cum varr: BERTOL: am: ital: p. 300. *Sardin*: in sinubus maritimis frequens MORIS st: sard: III. p. 24. omnes sub *Fuco*). Frons filiformis teres cartilaginea sæpius luride virens elongata flexuosa plus minus sparsim ramosa, fructificatio sub-hemisphærica lateralis sparsa. Stirps valde varians colore, statura, compositione etc.

\* ? 14. *Sph: plicatus* = AG: l. c. = SPR: syst: IV.



339. = Sub *Fuco* Gmel: *fuc*: p. 142. t. 14. f. 3. ali-  
que. Sub *Ceramio* Roth: *cat*: II. p. 162. Sub *Gigar-*  
*tina* Lamourx: (In mari *Atlant*: et *Septentr*: Ad rupes  
maris *Nicæens*: ALL: n. 2625. sub *Fuco*). Frons fili-  
formis teres cornea rigida rubens ramosa ramis erectis  
dichotomis apice 2-furcis, fructificatio lateralis ses-  
silis. Habeo ex *Oceano S. Malo* lectam a PERRET,  
nec ex *Mediterr*: in quo præter ALL: crescere etiam  
tradit cl: DC. fl: fr: n. 87.

\* 15. *Sph: Griffithiæ* = Ag: l. c. = Spr: syst: IV.  
339. Sub *Gigartina* Lyngb: Sub *Fuco* Turn: = *F.*  
*tentaculatus* Bertol: opusc: scient: di Bol: II. p. 292.  
t. 11. f. 8. et am: ital: p. 295. t. V. f. 8. (In mari  
*Atlant*:, *Septentr*: et *Mediterr*: In mari *Ligustico* a  
*Zoagli* in sinu *Tiguliorne* BERTOL: l. c.). Priori affi-  
nis, sed differt statura valde minori vix unciali, co-  
lore fusco, fructificatione clavæformi supremis divi-  
sionibus innata apice bicorniculata. Habeo ex mari  
*Adriatico* a cl: NACCARI nec ex *Mediterr*: *Sph: Grif-*  
*fithiæ* aliquantulum recedere a stirpe BERTOL: tradit  
idem NACCARI fl: ven: VI. p. 87., attamen specim: ab  
ipso communicatum perfectissime quadrat cum eit: ic:  
am: ital:

\* 16. *Sph: Helminthochortos* = Ag: l. c. = Spr:  
syst: IV. 339. = Sub *Fuco* Latourr: *journ: phys*: 20.  
t. 1. Jaum: pl: fr: t. 4. f. 1. 2. Sub *Ceramio* Roth:  
Sub *Gigartina* Lamourx: Vern: *Mouffa d' Corsica* (In  
mari *Mediterr*: ad litora *Corsicæ* DC. fl: fr: n. 88.  
In rupibus maris *Nicæens*: ALL: n. 2621. sub *Fuco*).  
Frons cornea linearis teres inferne simplex nigrescens  
superne ramosa rubescens ramis setaceis transverse

striatis, fructificatio hemisphærica lateralis sparsa. Planta anthelmintica.

\* 17. *Sph: musciformis* = Ag: l. c. = Spr: syst: IV. 340. = Sub *Fuco* Wulf: in Jacq: coll: III. p. 154. t. 14. f. 3. aliique. *F. setaceus* et *spinulosus* Esp: Sub *Ceramio* Ruching: Sub *Hypnea* Lamourx: (In mari *Atlant:*, *Mediterr:* et *Rubro*. Copiosissimus in *Luncæ* portu, *Genuæ* sub pharo majori, prope *Clavarum* etc. BERTOL: am: ital: p. 303. *Sardin:* in mari *S. Elia* sæpe ad alias Algas MORIS st: sard: III. p. 24. omnes sub *Fuco*). Frons filiformis fere capillaris cæspitosa flaccida elongata virescens ramosissima ramis setoso - hirtis, fructificatio globulosa lateralis sessilis minutissima. Stirps generatim enascens super alias substantias marinas.

\* 18. *Sph: Loncharion* = Spr: syst: IV. 340. = Naccar: fl: ven: VI. p. 84. = Sub *Fuco* Bertol: am: ital: p. 294. t. VI. f. 2. (In mari *Atlant:* et *Mediterr:* In mari *Ligustico* speciatim in rupibus marinis prope *Clavarum* BERTOL: l. c.). Frons capillaris vix uncialis erecta cæspitosa ramosa ramis sub-simplicibus apice fructificatione clavata sub-aggregata terminatis.

19. *Sph: repens* = Ag: l. c.? *Fucus furcatus* Esp: fuc: I. p. 178. t. 95. (*Sardin:* in mari *S. Elia* ad scopulos rarus MORIS st: sard: III. p. 24.). Plantam non vidi. Stirps dubia confusa a SPR: cum *Sph: Heredia*.

V. CHONDRIA Ag: spec: alg: XXIII. = Spr: syst: n. 3406.  
 = *Fuci*, *Sphærococci*, *Dasice*, *Ulvæ*, *Gigartinæ*,  
*Hipnæ*, *Acantophoræ*, *Conservæ*, *Gelidii*, *Lauren-*  
*renciæ*, *Gastridii*, *Ceramii* et *Lomentariæ* spec:  
 nonnullæ quorund: (Inter *Florideas genuinas* Ag:).

» *Frons* cartilaginea filiformis. *Fructus* duplex. *Ca-*  
*psulæ* sporidiis pyriformibus pedicellatis, et *globuli*  
 » sporidiorum ternorum immersi. »

*Obs:* Genus constans 25. circiter stirpibus ex *Fuco*  
 præsertim diremptis, per maria præcipue europæa  
 sparsis.

\* 1. *Ch: obtusa* = Ag: l. c. = Spr: syst: IV. 341.  
 Sub *Fuco* Huds: angl: p. 586. = Turn: fuc: t. 21.  
*F. gelatinosus* Bertol: am: ital: p. 84. 301. *Laurencia*  
*lactea*, *obtusa*, *intricata*, et *gelatinosa* Lamourx: (In  
 mari *Atlant:*, *Mediterr:* et *Rubro*. In mari *Ligust:*  
 speciatim in *Lunæ* portu sinu *delle Grazie*, a *Pegli*  
 in scopulis etc. BERTOL: ll. cc. BALB: el: p. 5. *Sardin:*  
 ad rupes in mari frequens MORIS st: sard: III. p. 25.  
 sub *F. obtuso*). *Frons* filiformis gelatinoso-cartilaginea  
 ramosissimo-decomposita ramis ramulisque sub-oppo-  
 sitis abbreviatis sub-clavatis. Variat multimode statura,  
 compositione et colore generatim tamen ex viridi lu-  
 tescente. Cons: præter BERTOL: l. c. p. 84. cl: NACCAR:  
 fl: ven: (VI. p. 77.

\* 2. *Ch: pinnatifida* = Ag: l. c. = Spr: syst: IV.  
 341. = Sub *Fuco* Huds: angl: p. 437. n. 32. Gmel:  
 fuc: t. 16. f. 3. Fl: dan: t. 1478. aliique (In mari  
*Atlant:*, *Septentr:* et *Mediterr:* Ad rupes maris *Ni-*  
*cæens:* ALL: n. 2628. sub *Fuco*). *Frons* compressa sub-



gelatinosa rosea superne 2-3-pinnatifido-ramosa ramulis obtusis calloso-dentatis. Variat frondibus angustioribus solidioribus; ad hanc spectant stirps *Nicænsis*: et ic: supra cit:

\* 3. *Ch: kaliformis* = Ag: l. c. = Spr: syst: IV. 342. = *Fucus kaliformis* β Turn: fuc: I. p. 61. t. 29. f. 4. Bertol: am: ital: p. 302. Sub *Gigartina* Lamourx: (In mari *Atlant:* et *Mediterr:* *Genuæ* in scopulis sub *Albaro* ad *S. Julianum* BERTOL: l. c. *Sardin:* ad scopulos in mari *S. Elia* MORIS st: sard: III. p. 24.). Frons teretiuscula gelatinosa pallide virens vel leviter rubescens articulata ramosa ramis passim verticillatis obtusiusculis ramulis tenuissimis, ex quibus distinguitur a vera *Ch: kaliformi* Ag: (*Fucus kaliformis* trans: linn: III. p. 206. t. 18.), quæ crescit tantum in *Oceano*. Cl: NACCARI fl: ven: VI. p. 79. observat, plantam nostram differre quoque a *Ch: kaliformi* β *torulosa* ejusd: Ag:

VI. RHODOMELA Ag: spec: alg: XXIV. = Spr: syst: n. 3407. = *Fuci*, *Delesseriæ*, *Odontheliæ*, *Dictyopteridis*, *Confervæ*, *Gigartinae*, *Cladostephi*, *Ceramii* spec: nonnullæ quorund: (Inter *Confervoideo-florideas* Ag:).

» Frons foliaceo-plana sub-costata vel filiformis.  
 » Fructus duplex; lomenta globulis massæ sporoidææ  
 » longitudinaliter repleta, et caps: sporidiis paucis  
 » pyriformibus sessilibus. »

Obs: Genus constans 12. circiter stirpibus per maria sparsis, inter quas tertia pars europæa.

\* ? 1. *Rh: dentata* = Ag: l. c. = Spr: syst: IV.

342. Sub *Fuco* L. mant: p. 135. = *F. pinnatifidus* Oed: fl: dan: t. 354. non Huds: Sub *Delesseria* Lamourx: Sub *Odonthalia* Lyngb: (In mari *Atlant:* et *Septentr:* In mari *Nicæens:* ALL: n. 2617. sub *Fuco*). Stirpem non possideo; præter ALL: nemo inter Botanicos italicos illam enumeravit quod sciam.

\* 2. *Rh: volubilis* = Ag: l. c. = Spr: syst: IV. 343. Sub *Fuco* L. sp: 1627. = Wulf: in Jacq: coll: III. p. 149. t. 13. f. 2. aliiq. *Delesseria spiralis* Lamourx: (In mari *Mediterr:* et *Nigro* ad litora, *N. Holl:* Ad mare *Nicæens:* ALL: n. 2631. In *Lunæ* portu sed rara BERTOL: am: ital: p. 291. *Sardin:* ad scopulos demersos *Porto-paglia* MORIS st: sard: III. p. 25. omnes sub *Fuco*). Frons plana membranaceo - coriacea rubro-fusca spiraliter torta denticulata enervis parce ramosa, fructificatio marginalis evidentissima rosea.

3. *Rh: subfusca* = Ag: l. c. Sub *Fuco* trans: Linn: I. t. 12. aliiq. Sub *Gigartina* Lyngb: (In mari *Atlant:*, *Septentr:* et *Mediterr:* *Sardin:* ad scopulos marinos *Cala lunga*, ins: *di S. Pietro* MORIS st: sard: III. p. 25.). Frons filiformis ramosissima fusca supra-decomposita ramis ramulisque capillari-setaceis sub - fasciculatis, fructificatio minutissima lanceolata aggregata.

\* 4. *Rh: pinastroides* = Ag: l. c. = Spr: syst: IV. 343. = Sub *Fuco* Gmel: fuc: p. 127. t. 11. f. 1. Engl: bot: t. 1042. præsertim pro fructificatione, aliiq. Sub *Gigartina* Lyngb: *Ceramium incurvum* DC. fl: fr: n. 101. (In mari *Atlant:* et *Mediterr:* In maris aquis prope *Albengam* Re app: III. p. 19. Copiose in *Lunæ* portu, occurrit quoque *Segestæ Tiguliorum*,

et in littoribus inter *Pegli* et *Voltri* rejecta ab undis  
 BERTOL: am: ital: p. 307. *Sardin:* in mari *Puntanera*  
 ins: *S. Pietro* frequens MORIS st: sard: III. p. 25. sub  
*Fuco*). Priori valde affinis, sed differt fronde ramis-  
 que firmioribus crassioribusque rigidiusculis, ramulis  
 incurvis, fructificatione sphaerica axillari vel laterali.

VII. PTILOTA Ag: sp: alg: XXV. = Spr: syst: n. 3409.

*Fuci*, *Ceramii* et *Plocamii* spec: nonnullæ quorund:  
 (Inter *Confervoideo-florideas* Ag:).

» *Frons* pectinato-pinnata. *Globuli* sporidiorum in-  
 » volucrati. »

*Obs:* Genus constans 3. stirpibus, quarum 1. tan-  
 tum europæa.

\*? 1. *Pt: plumosa* = Ag: l. c. = Spr: syst: IV.  
 344. Sub *Fuco* L. mant: p. 134. = Stackn: ner: brit:  
 p. 105. c. ic: Sub *Ceramio* Roth: Sub *Plocamio* La-  
 mourx: (In mari *Atlant:* et *Septentr:* In mari *Nicaens:*  
 et *Uneliæ* ALL: n. 2628.). Dubitanter inter cives enu-  
 mero hanc stirpem sola fide cl: ALL:; illam non pos-  
 sideo, nec scio ab aliis in *Mediterr:* unquam reper-  
 tam fuisse. Habeo *Pt: asplenioideam* Ag: l. c. in do-  
 num datam a cl: MARTIO ex mari *Groënlandico* et  
*Chinensi* frondem gerentem planiusculam cartilagi-  
 neam rubentem ramosissimam, ramis patentibus de-  
 compositis, ramulis brevissimis sub-serratis, fructi-  
 ficationem lateralem minutissimam frondi concolorem.



VIII. POLYIDES Ag: sp: alg: XXVII. = Spr: syst: n. 3410.  
(Inter *Nostochino-florideas* Ag:).

» *Frons* filiformis cartilaginea e fibris radiantibus  
» composita. *Verrucæ* laterales spongiosæ, fibrillis  
» sporidia sustentantibus. »

*Obs:* Genus constans unica stirpe sequenti.

1. *P. lumbricalis* = Ag: l. c. = Spr: syst: IV. 344.  
= Sub *Fuco* Gmel: fuc: p. 110. t. 6. f. 3. *F. rotundus* Turn: *Furcellaria rotunda* Lyngb: (In mari *Atlant:*, *Septentr:* et *Mediterr:* In mari *Nicæens:* et *Uneliæ* ALL: n. 2615. sub *Fuco rotundo*). Olivaceofuscus ramosus, rami teretes obtusi, verrucæ incarnatæ. Sæpe confusus ab Auctoribus cum *Furcellaria lumbricali*, cui facie valde similis, sed fructificatione diversa.

IX. LIAGORA Ag: sp: alg: XXVIII. = Spr: syst: n. 3411.  
= *Fuci* spec: quorund: (Inter *Zoophito-florideas* Ag:).

» *Frons* filiformis replicato - 2 - partita tuberculosa  
» rigida extus viscida, sicca fragilis. *Fructus* in fibris  
» fruticulosus apices frondis investientibus. »

*Obs:* Genus constans 3. stirpibus ex mari *Mediterr:* et *Rubro*.

\* 1. *L. viscida* = Ag: l. c. = Spr: syst: IV. 344.  
*L. versicolor* Lamourx: Sub *Fuco* Forsk: fl: ægypt: p. 193. = Turn: fuc: II. p. 127. t. 119. aliique. *F. lichenoides* DC. fl: fr: suppl: p. 6. n. 71.<sup>a</sup> non Esp: nec Good: nec Turn: (In *Lunæ* portu sinu delle *Grazie* super saxa in fundo maris, tum prope arcem *S. Theresiæ*, *Genuæ* in scopulis sub *Albaro* vel in li-

toribus e mari copiose rejecta BERTOL: am: ital: p. 296. sub *Fuco*). Frons teres statim dichotoma alba ramossissima rigida viscida ramis divaricatis ultimis furcatis obtusis, fructificatio globosa; facies *Lichenis*. Stirps dubia pro synonymia.

\* 2. *L. distenta* = Ag: l. c. = Spr: syst: IV. 344. = Sub *Fuco* Mut: Roth: (In mari *Mediterr*: In maris aquis prope *Albengam* RE app: III. p. 19.). Vix differt a priori ramulis acutis.

X. AMPHICONIUM Spr: syst: n. 3412. ex Nees: = *Byssi*, *Confervæ*, *Ectocarpi*, *Trentepohliæ*, *Leprariæ*, *Chroolepi* spec: nonnullæ quorund:

» Frons filiformis rigidiuscula granulis aspera, apicibus ramulorum in fructus speciem tumentibus. »

Obs: Genus constans 3 - 4. stirpibus terrestribus sæpe parasiticis in arborum cortice vel ad saxa, *Confervaceis* valde affinibus, et ad ipsas a *Florideis* transitum facientibus.

\* 1. *A. aureum* = Spr: syst: IV. 344. ex Nees: = Sub *Byssu* L. sp: 1638. = Dill: musc: t. 1. f. 16. Sub *Conferva* Dillw: *C. ilicicola* Engl: bot: 1639. (Ad rupes et ligna inundata *Eur: Pedem*: in rupibus et supra lapides ALL: n. 2660. sub *Byssu*. RE fl: segus: p. 91. Locis humidis supra trabes *al Valentino* BALB: fl: taur: p. 192. Supra terram in uliginosis collium et in lignis humidis BIROL: fl: acon: II. p. 207.). Fili tenuissimi intricati cæspites rotundato-convexos aureo-pulverulentos formantes.

Obs: geographica circa *Florideas*.

*Floridæ* per orbem sparsæ circiter . . . 150

*Floridæ* ligusticæ, nicæenses et pedemontanæ.

<i>Warmskioldia</i>	3
<i>Halymenia</i>	1
<i>Grateloupia</i>	1
<i>Sphærococcus</i>	16
<i>Chondria</i>	3
<i>Rhodomela</i>	3
<i>Ptilota</i>	1
<i>Polyides</i>	1
<i>Liagora</i>	2
<i>Amplisonium</i>	1

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Et sic quintam partem excedunt.



## ORDO CCVI.

## CONFERVINÆ

(Spr: syst: IV. p. 312. = *Confervoidearum* magna pars Ag: disp: alg: p. 25. = Bartl: ord: nat: p. 10. = *Algarum confervoidearum* pars Mart: consp: regn: veg: p. 1. = *Algarum* genn: Juss: gen: p. 6.).

*Char: essentialis.*

» *Frons* filiformis solida vel tubulosa articulata.»

*Obs:* Ordo constans ex SPR: 11. generibus. Vegetabilia alia marina alia in aqua dulci degentia, affixa vel fluctuantia, fructificatione in nonnullis valde obscura.

I. CLADOSTEPHUS Ag: spec: alg: XL. = Spr: syst: n. 3414. = *Fuci*, *Confervæ*, *Spongiæ*, *Ceramii*, *Sphacellaricæ*, *Hutchinsicæ*, *Chætosporæ* spec: nonnullæ quorund: (Inter *Confervoideas* Ag:).

» *Frons* solida, filis articulatis rigidis, ramis copiosis verticillatis. *Articuli* sub-fasciati. *Ramuli* in *cap-sulas* tumescentes.»

*Obs:* Genus constans 10-12. stirpibus, omnibus marinis præsertim ex *Eur:*

\* 1. *Cl: spongiosus* = Ag: l. c. = Spr: syst: IV. 346. Sub *Conferva* Huds: angl: 596. = Engl: bot: t. 2427. Sub *Ceramio* DC. fl: fr: n. 89. *Fucus hirsutus* L. mant: 134. non Wulf: nec Esp: aliorumq:

(In mari *Atlant:* et *Septentr:* In maris aquis prope *Albengam* RE app: III. p. 19.). Frons cylindracea filiformis ex viridi lutescens parce ramosa undique filis confertissimis simplicibus incurvis oblecta.

\* 2. *Cl: clavæformis* = Ag: l. c. = Spr: syst: IV. 346. Sub *Conferva* Roth: cat: III. p. 315. *Fucus vermicularis* Bertol: am: ital: p. 308. = Sub *Spongia* Scop: carn: ed: 2. tom: II. p. 412. t. 64. (In mari *Atlant:* et *Mediterr:* *Liguria* in *Lunæ* portu loco dicto *Pertusole* super saxa quæ degunt in æquoris fundo, ex mari *Clavarum* alluente BERTOL: l. c. p. 309. *Sardin:* ad saxa in fundo maris *S. Elia* MORIS st: sard: III. p. 25.). Frons clavata vermiculiformis simplex fusca filis brevissimis imbricatis 3 - furcis patentibus oblecta.

\* 3. *Cl: Myriophyllum* = Ag: l. c. = Spr: syst: IV. 346. = *Fucus verticillatus* Wulf: crypt: aquat: p. 41. n. 15. t. 1. aliique. *F. hirsutus* Wulf: l. c. p. 57. n. 37. aliique excl: syn: L. *Ceramium verticillatum* DC. fl: fr: n. 90. excl: pariter syn: L. (In mari *Atlant:* et *Mediterr:* *Ligur:* obvius in *Lunæ* portu in fundo maris et in scopulis prope oras, *Genuæ* ad litora rejectus occurrit, in mari *Clavarum* alluente BERTOL: am: ital: p. 308. sub *F. verticillato*. *Sardin:* ad scopulos demersos *S. Eliæ*, *Carloforte* MORIS st: sard: III. p. 25.). Magis figura accedit ad *Cl: spongiosum* n. 1., cum quo sæpe ab Auctoribus confusus, sed differt præsertim filis *verticillatis* passim *ramulosis furcatis*.

\* 4. *Cl: scoparius* = Spr: syst: IV. 347. = Sub *Conferva* L. sp: 1635. = Dill: musc: t. 4. f. 23.

Engl: bot: t. 1552. Sub *Ceramio* DC. fl: fr: n. 96. Sub *Sphacelaria* Lyngb: aliiq (In mari *Atlant:*, *Septentr:* et *Mediterr:* In mari *Nicæens:* ALL: n. 2650. sub *Conferva*. *Sardin:* ad scopulos in mari ins: *di S. Pietro* MORIS st: sard: III. p. 23. sub *Ceramio*). Frons confertissimæ fasciculatæ fusco - olivaceæ singulæ tenuissimæ filis seu ramis sub - pinnatis ramulis adpressis erectis acuminatis.

II. ECTOCARPUS Spr: syst: n. 3415. ex Lyngb: = *Fuci*, *Rytiphlocæ*, *Moestingiæ*, *Confervæ*, *Ceramii* spec: nonnullæ quorund:

» *Frons* tubulosa, filis articulatis. *Capsulæ* globosæ  
» vel elongatæ siliquæformes laterales. »

*Obs:* Genus constans ex Spr: 8. stirpibus maria europæa præsertim septentrionalia inhabitantibus.

\* 1. *E. purpureus* = Spr: syst: IV. 347. = Sub *Fuco* Esp: ic: fuc: I. p. 114. t. 58. = Bertol: am: ital: p. 306. t. V. f. 7. a a b aliiq. *Rytiphlocæ tinctoria* Ag: Naccar: aliiq (In mari *Mediterr:* et *Rubro*. Ad rupes maris *Nicæens:* ALL: n. 2624. *Ligur:* in *Lunæ* portu scopulis demersis vel rejectus ad litora, in mari *Clavaram* alluente BERTOL: l. c. *Sardin:* ad scopulos demersos MORIS st: sard: III. p. 25. omnes sub *Fuco*). Frons linearis cartilaginea compressa plus minus intense purpurea superne ramosa ramis decompositis ramulis ultimis apice incurvis, fructificatio globosa sessilis.

\* 2. *E. tomentosus* = Spr: syst: IV. 347. ex Lyngb: = Sub *Conferva* Huds: angl: p. 480. = Dill: musc: 19. t. 3. f. 12. aliiq. Sub *Ceramio* Ag: *C. compactum*



Roth: (In mari *Septentr*: Ad litus maris *Nicæens*: ALL: n. 2645. sub *Conferva*). Frons spongiosa villosissima tenerrima ramosa ramulis divaricatis; fructificationem non vidi nec in hoc nec in seq:

✱ 3. *E. ferrugineus* = Spr: syst: IV. 347. ex Ag: = *Conferva littoralis* L. fl: succ: 1028. non Dillw: = Fl: dan: t. 1487. f. 2. Dill: musc: 23. t. 4. f. 19. *C. ferruginea* Lyngb: *Ceramium ferrugineum* Ag: sec: Steud: (In mari *Septentr*:, *Baltico* et sinu *Codano*. In rupibus litoris *Nicæens*: ALL: n. 2648. sub *Conferva littoralis*). Vix differt a priori ramis seu filis magis implicatis, articulis diametro duplo longioribus. Cave ne stirpem hanc confundas cum *Conferva littoralis* DILLW: et Auctorum eadem ac *Ectocarpus littoralis* LYNGB: et SPR:; in hoc articuli sunt tantum diametro sub-longiore. Crescit autem in mari *Atlant*:, *Septentr*: et *Baltico*, et repertus quoque fuit in *Sardin*: ad rupes *Porto-scuso* (MORIS st: sard: III. p. 23. sub *Ceramio confervoideo*).

III. POLYSIPHONIA Spr: syst: n. 3416. ex Grev: = *Conserve*, *Ceramii*, *Callithamnionis*, *Hutchinsiae*, *Fuci*, *Hypneæ* spec: nonnullæ quorund:

» Frons solida articulata, striis seu tubulis longitudinalibus. Fructus duplex; caps: sporidiis paucis  
» pyriformibus fartæ, et globuli massæ sporoideæ  
» seriatim ramulis innatæ.

Obs: Genus constans ex SPR: 27. stirpibus præcipue ab *Hutchinsia* AG:, quæ omnino proscripta, diremptis, omnibus marinis, permultis europæis. *Hutchinsia* R. BK: pertinet ad *Cruciferas* vol. I. p. 142.

1. *P. violacea* = Spr: syst: IV. 348. = Sub *Ceramio* Roth: cat: I. t. 8. f. 2. aliique. = *Hutchinsia allochroa* Ag: (In mari *Atlant:* et *Septentr:* In mari *Adriat:* NACCAR: fl: ven: VI. p. 60. sub *Hutchinsia*. *Sardin:* in portu ins: *Caralis* MORIS st: sard: III. p. 23. sub *Ceramio*). Frons compressiuscula ramosissima atro-violacea ramis virgatis filiformibus infimis subinarticulatis mediis articulis diametro multoties longioribus supremis articulis sesquolongioribus, capsulæ sessiles. Huc pertinet *Ceramium fucoides* Huds: et DC. fl: fr: n. 105. Planta sardoa refertur ad var:  $\gamma$  (*Ceramium violaceum* var: *allochroum*).

\* 2. *P. elongata* = Spr: syst: IV. 349. = Sub *Conferva* Huds: angl: 484. = Dill: musc: 35. t. 6. f. 38. Sub *Ceramio* Roth: DC. Sub *Hutchinsia* Ag: *Fucus diffusus* fl: dan: t. 1836. (In mari *Atlant:* et *Septentr:* In litore *Nicæens:* ALL: n. 2656. sub *Conferva*). Frons cylindrica atro-purpurea basi simplex hinc ramosissima, rami filiformes stricti valde elongati sub-ramulosi articulis diametro brevioribus; fructificationem non vidi.

3. *P. filamentosa* = Spr: syst: IV. 349. Sub *Fuco* Wulf: *Ceramium fibrosum* Roth: (In mari *Atlant:*, *Indico* et *Mediterr:* *Sardin:* ad rupes in mari *S. Elia*, *Porto-scuso* MORIS st: sard: III. p. 22. sub *Ceramio fibroso*). Frons planiuscula ex viridi lutescens ramosissima, rami filiformes multoties divisi, ramuli capillari-setacei brevissimi et fili longissimi simplices cum illis commixti; stirps pro synon: obscura; videtur pertinere ad *Scytotiphon sæniculaceum* Ag: var:  $\beta$ .

Vid: supra sub hoc genere n. 1. In planta sardoa communicata a cl: MORISIO fructificatio non adparet.

\* 4. *P. fruticulosa* = Spr: syst: IV. 350. = Sub *Fuco* Wulf: in Jacq: coll: III. p. 159. t. 16. f. 1. aliiq: = Sub *Hutchinsia* Ag: *Ceramium Wulfenii* Roth: cat: III. p. 140. n. 27. *Conferva polymorpha* Desf: sec: Spr: non L. (In mari *Mediterr:* et ad litora *Cornubiæ. Ligur:* præsertim in *Lunæ* portu super *Fucos* majores, *Genuæ* sub *Albaro* rejecta a mari BERTOL: am: ital: p. 306. sub *Fuco*. *Sardin:* in mari *Porto-scuso* ad scopulos MORIS st: sard: III. p. 24.). Stirps super alias *Algas* præsertim crescens insignesque globulomeres fusco-virentes efficiens ex frondibus filiformibus rigidiusculis ramosissimis, ramis implexis multifariam divisis, ramulis ultimis brevissimis quandoque sparse spinosis (*Hutchinsia fruticulosa*  $\beta$  *spinosa* Ag:); fructificatio minutissima sessilis globulosa.

\* 5. *P. fastigiata* = Spr: syst: IV. 350. = Sub *Ceramio* Roth: cat: II. p. 175. Sub *Hutchinsia* Ag: *Conferva polymorpha* L. syst: IV. p. 591. non Desf: = Fl: dan: t. 395. Dill: musc: t. 6. f. 35. *Ceramium polymorphum* DC. fl: fr: n. 106. (In mari *Septentr:* Ad litus maris *Nicæens:* ALL: n. 2654. sub *Conferva polymorpha*). Frons cartilaginea cylindrica filiformis nigrescens ramosissima ramis multoties dichotomis fastigiatis ultimis capillaribus brevissimis articulis diametro brevioribus, fructificatio sub-terminalis ovata sessilis. Variat multimode magnitudine, colore et compositione.



*Species nova.*

6. *P. pilosa* = Nob: *Hutchinsia pilosa* Nacc: fl: ven: VI. p. 62. f. 2. *H. spinulosa* Ag: ? (In mari *Veneto* Nacc: l. c.). « *P. fronde teretiuscula crassiuscula* » (ex viridi rubescente) irregulariter ramosissima hinc » inde fasciculis spiniformibus pilorum brevissimorum » exasperata, ramis divaricatis multoties divisis, ramulis capillaribus, articulis diametro sub-æqualibus, capsulis lateralibus rotundatis sessilibus. » Nob: Ad genus *Hutchinsiae* Ag: pertinere pulchellam hanc stirpem a cl: NACCAR: nobis communicatam, fructificatio et habitus suadent; ideo illam ad *Polysiphoniam* cum cujus characteribus prorsus convenit, amandandam censui ne confundatur cum *Hutchinsia* R. BR: a recentioribus Botanicis probata.

IV. GRIFFITHIA Ag: sp: alg: XLIII. = Spr: syst: n. 3418. = *Conservæ*, *Collithamnion*, *Ceramii* spec: nonnullæ Auctor: (Inter *Confervoideas* Ag:).

» *Frons* filis articulatis replicato-bipartitis vel rarius verticillatis roseis. *Sporidia* gelatinæ involu- » cratæ immersa. »

*Obs:* Genus constans 4. stirpibus a *Conserva* differentis, omnibus ex mari *Atlant:* vel *Mediterr:*

\* 1. *Gr. corallina* = Ag: l. c. = Spr: syst: IV. 351. Sub *Conserva* L. syst: XII. p. 721. = Dill: musc: 33. t. 6. f. 16. *C. corallinoides* Huds: Sub *Callithamnion* Lyngb: *Ceramium corallinoides* Bertol: fl: ital: ined: sec: Moris st: sard: III. p. 23. (In mari *Atlant:*

et *Mediterr*: In litore maris *Nicæens*: ALL: n. 2653. sub *Conferva*. *Sardin*: ad scopulos marinos MORIS l. c. sub *Ceramio corallinoideo*). Frons compressiuscula ramosissima filis elongatis sub-fastigiatis replicato-2-partitis, articuli incrassati diametro longiores, fructificatio globosa terminalis vel in dichotomia ramorum.

2. *Gr: setacea* = Ag: l. c. Spr: syst: IV. 351. Sub *Conferva* Huds: Roth: Sub *Ceramio* Bertol: fl: ital: ined: sec: MORIS st: sard: III. p. 23. *C. penicillatum* DC. fl: fr: n. 102. sec: Spr: (In mari *Atlant*: et *Mediterr*: *Sardin*: ad scopulos aliaque marina *S. Elia* MORIS l. c.). Frons ramosissima ramique sparsi prorsus setaceo-capillares, articuli oblongi diametro sub-æquales; fructificationem detegere non potui.

V. CERAMIUM Spr: syst: n. 3419. = *Ceramii* spec: Roth: Ag: = *Confervæ* et *Callithamnion* spec: plures Auctor:

» Frons ramosa solida articulata rubra. Caps: globosæ sporidia numerosa includentes. »

Obs: Genus a cl: ROTH: creatum, ab Auctoribus sæpe immutatum, nunc constans ex SPR: 20. stirpibus omnibus a *Confervæ* Auctor: diremtis, plaribus aliarum Algarum parasiticis, per maria sparsis.

\* 1. *C. diaphanum* = Spr: syst: IV. 352. ex Roth: = Sub *Conferva* Ligth: f. scot: 996. = Engl: bot: t. 1742. *Ceramium forcipatum* var:  $\beta$  *glabellum* DC. fl: fr: n. 110. (In aliis Algis marium plerumque. In mari *Nicæens*: BALB: el: p. 4. *Sardin*: ad alias Algas saxaque MORIS st: sard: III. p. 23.). Frons filiformis

cylindrica ramosissima replicato - dichotoma, ramuli ultimi apice forcipati, articuli cylindrici hyalini geniculis turgidis glabris in var:  $\beta$  *glabella*, ciliatis in var:  $\alpha$  *ciliata* (*C. pilosum* NACCAR: fl: ven: VI. p. 58.), capsulæ involucratae. Cl: SPR: duas species admittit de *C. diaphano* et *ciliato*, sed cl: DC. observavit *C. ciliatum* ætate cilia amittere, unde horum præsentiam vel defectum pauci habendum. Attamen cl: NACCAR: l. c. observat, *C. ciliatum* differre etiam statura minori, ramis crebrioribus, colore saturatiori, quæ omnia adparent in specim: ab ipso humaniter mihi communicatis cum pluribus aliis *Algis* ex mari *Adriatico*.

2. *C. rubrum* = Spr: syst: IV. 352. ex Ag: Sub *Conferva* Huds: *Ceramium axillare* DC.? (In maribus plerisque. *Sardin:* ad rupes in mari *S. Elia*, *Porto-scuso* MORIS st: sard: III. p. 23.). Differt a priori ramis magis elongatis irregulariter divisus summis non forcipatis, articulis ovatis opacis, geniculis contractis. = 3. *C. Morisianum* = Bertol: ined: (*Sardin:* in mari *Porto - scuso* ad rupes MORIS st: sard: III. p. 23.). Frons setaceo-capillaris rufescens ramosissima cæspitem formans, rami dense implexi, articuli breves cylindracei pellucidi; fructificationem cernere non potui; ex MORISIO lateralis sub - sessilis turbinata. Cl: Auctor dubitat an ad *Griffithiam* stirps hæc, ceterum novissima, sit amandanda.

\* 4. *C. penicillatum* = Bertol: fl: ital: ined: sec: Moris st: sard: IV. p. 23. = Ic: ? (*Sardin:* in stagno salso *S. Antioco* ad *Zosteras* aliaque corpora. In *Lunæ* portu jampridem inventum a BERTOL: sec: MORIS l. c.). Frons filiformis rosea ramosissima, rami elongati ca-



pillares, geniculi verticillato - filamentosi filamentis apice penicillatis, fructificatio terminalis et lateralis sub-pedicillata turbinata; stirps speciosissima.

5. *C. simplex* = Bertol: fl: ital: ined: sec: Moris st: sard: III. p. 23. Sub *Conferva* Wulf: Sub *Digenea* Ag: (*Sardin:* in *Fuco pinastroide* MORIS l. c.). Frons filiformis setulis articulatis tecta, fructificatio inconspicua; omissa a SPR: Habeo ex MORIS.

VI. CONFERVA Lin: syst: ed: Murr: n. 1207. excl: nonnullis stirpib: = Spr: syst: n. 3421. = *Conservæ*, *Mycinemæ*, *Pratonemæ*, *Byssi*, *Chroolepi*, *Syncollesicæ*, *Hygrocrocidis*, *Proliferæ*, *Conjugatæ*, *Chantansiæ*, *Polyspermæ* spec: nonnullæ quorund: (Inter *Confervoideas* Ag:).

» *Fila* tubulosa membranacea articulata. *Granula*  
» intus sparsa. »

*Obs:* Genus pro stirpibus inter ceteras Algas extricatu difficillimum, proinde confusio apud Auctores non levis præsertim circa synonymiam; fructificatio in multis fere inconspicua. Plantæ aliæ terrestres, aliæ in aquis dulcibus vel marinis nascentes, modo simplices modo ramosæ, virides vel coloratæ, plures parasiticæ, omnes generatim tenerrimæ. Pro *Confervis* aquarum dulcium cons: præsertim cl: VAUCHER Hist: des Conferves d'eau douce etc. Genève 1803., et Journ: phys: flor: an IX., qui primus nonnullarum stirpium fructificationem rite determinavit, descripsit et pinxit.

## A. Terrestres.

\* 1. *C. velutina* = Spr: syst: IV. 354. ex Dillw: ? = Sub *Byssus* L. sp: 1638. = Dill: musc: p. 7. t. 1. f. 14. Michel: gen: 211. t. 89. f. 11. *Ectosperma terrestris* Vauch: conf: p. 27. t. 2. f. 3. *Vaucheria terrestris* DC. fl: fr: n. 152. *Protonema velutinum* et *repens* Ag: sec: Spr: ? (In terris arenosis humidis. *Pedem*: in terra et ad muros septentrioni expositos ALL: n. 2659. sub *Byssus*. *Novar*: ad parietes locis humidis frequens BIROLI fl: acon: II. p. 207.). Fili viridi-hyalini intricati superius stratum velutinum densissime implexum formantes. Vereor ne a cl: SPR: eadem planta sub duabus stirpibus enumerata fuerit, sc: *Conferva velutina* l. c. et *Vaucheria terrestris* p. 364. n. 4. Cl: VAUCHER suæ *Ectospermæ terrestri* tribuit syn: L. supra citatum, quod *Confervæ velutinæ* similiter tribuitur a SPR: ; at sub *Vaucheria terrestri* DC. alia refert synonyma idem SPR: etsi DC. *Byssum velutinum* L. et *Vaucheriam* suam eandem plantam crediderit ; ex nimis brevibus SPR: phrasibus clariorem lucem eruere non possum ; ceterum planta pedemontana est verus *Byssus velutinus* L., de quo suam *Ectospermam terrestrem* creavit VAUCH: Vid: infr: *Vaucheriam terrestrem*.

## B. Aquarum dulcium:

\* 2. *C. floccosa* = DC. fl: fr: n. 140. = Spr: syst: IV. 355. ex Ag: = Sub *Prolifera* Vauch: conf: p. 131.

t. 14. f. 3. et journ: de phys: t. 4. f. 12. *Conserva sordida* Engl: bot: et *fugacissima* Lyngb: non Roth: sec: Spr: (In fossis *Eur: bor:*, in aquis vivis et tranquillis *Pedem:* observavi sed raram et fugacissimam). Fili longissimi tenuissimi in bullas implicitas viridiluteolas superne abeuntes, articuli latitudine longitudinem vix excedentes, fructificatio inconspicua. Stirpium omnium hujusce sectionis maxima sec: VAUCH: *C. fugacissima* ROTH:, quam etiam possideo, crescit in *Germaniæ* fossis, et differt filis *arachnoideis*, articulis centro *diaphanis*.

\* 3. *C. tumidula* = Spr: syst: IV. 355. ex Sm: = *C. inflata* DC. fl: fr: n. 128. = Engl: bot: t. 1670. *Conjugata inflata* Vauch: conf: p. 68. t. 5. f. 3. (In aquis stagnantibus *Eur: Pedem:* cum priori). Fili simplicissimi hyalini, articuli cylindrici longitudine latitudinem ter excedente, materia viridis spiraliter disposita in articulis demum inflatis (*semina ovata intra loculos inflatos contenta* VAUCH:).

\* 4. *C. vesicata* = Spr: syst: IV. 355. ex Ag: = Mull: nov: act: Petrop: III. p. 95. t. 2. f. 6. = Sub *Prolifera* Vauch: conf: p. 132. t. 14. f. 4. Sub *Chantransia* DC. fl: fr: n. 124. *Conserva nodosa* Vauch: journ: de phys: t. 4. f. 11. *C. alternata* Dillw: sec: Spr: (In aquis stagnantibus *Eur: Pedem:* in fossis aquaticis foliis et caulibus plantarum aquaticarum adhærens). Fili simplicissimi olivaceo-hyalini, articuli diametro sesquilingiores materia viridi semi-repleti, insuper hinc inde ad nodos incrementa vesicæformia seu surculi sphaerici ex quibus filii alii interdum enascuntur.



\* 5. *C. rivularis* = L. sp: 1633. = Spr: syst: IV. 356. = Dill: musc: 12. t. 2. f. 2. Michel: gen: 210. n. 3. t. 89. f. 7. Sub *Prolifera* Vauch: conf: p. 129. t. 14. f. 1. Sub *Chantransia* DC. fl: fr: n. 122. (In fluviis et rivulis *Eur: Pedem: secus puras lente fluentes aquas* ALL: n. 2641. RE fl: segus: p. 91. BIROLI fl: acon: II. p. 205.). Fili simplicissimi longissimi tenaces fluctuantes virides opaci, articuli diametro pluries longiores materia viridi repleti, surculi uti in priori sed ratione plantæ tenuiores.

\*? 6. *C. fontinalis* = L. syst: XII. p. 720. = Spr: syst: IV. 356. = Dill: musc: 14. t. 2. f. 3. Michel: gen: 211. n. 8. t. 89. f. 8. Engl: bot: t. 2054. (In aquis fluentibus et stagnantibus. *Pedem: ad originem fontium lente fluentium* ALL: n. 2642.). Differt a priori filis brevioribus intricatis badio - olivaceis, articulis diametro pluries brevioribus. Post ALL: nemo inter nostrates, neque cl: VAUCH: et DC. de hac stirpe mentionem fecerunt; an cum affinibus confusa?

\* 7. *C. glomerata* = L. sp: 1637. = Spr: syst: IV. 356. = Sub *Polisperma* Vauch: conf: p. 99. t. 10. f. 4. 5. Sub *Chantransia* DC. fl: fr: n. 121. Sub *Ceramio* Bertol: fl: ital: ined: sec: MORIS st: sard: III. p. 23. *Conserva polymorpha* L. non Desf: (*Eur: in aquis celeriter fluentibus. Pedem: secus rivulos aquarum et canales molendinorum* ALL: auct: n. 2653. \* p. 52. sub *C. sericea* exclusis synonymis. Ad aquas fluentes circa *Taurin: RE fl: tor: II. p. 220. sub Ceramio. Sardin: ad saxa in aquis dulcibus MORIS l. c.*). Fili ramosissimi virides, articuli circa medium tumiduli diametro pluries longiores materia viridi re-

pleti. Stirps saxi adhærens nec fluctuans. Huc videtur pertinere *C. sericea* ALL: non HUDS: Hæc est planta ex mari *Baltico* et *Septentr:* nec crescit in aquis dulcibus, nec in *Mediterr:* quod sciam.

### C Aquarum salsarum.

\* 8. *C. Linum* = Roth: cat: I. p. 174. = Spr: syst: IV. 356. = Engl: bot: t. 2363. Dill: musc: t. 5. f. 25. A. Sub *Ceramio* DC. fl: fr: n. 112. (In maribus plerisque. In mari *Nicæens:* BALB: el: p. 4. *Sardin:* in litoreis marinis *S. Elia*, *S. Antioco* MORIS st: sard: III. p. 23.). Fili simplicissimi longissimi minus quam capillares virides opaci rigidiusculi articuli diametrum sub-æquantes; fructificationem non vidi; globuli sessiles sphaerici filis adhærentes sec: DILLW: Huc pertinet *C. capillaris* WULF:, RACHING:, POLLIN: non L. nec ROTH: nec Engl: bot: sec: NACCAR: fl: ven: VI. p. 50.

\* 9. *C. Ægagropila* = L. syst: ed: Murr: p. 795. = Spr: syst: IV. 359. = Ic: ? (In lacubus salsis et mari *Septentr:* *Pedem:* reperta fuit a BELLARD: in fossis versus *Clarascum* ad latera viæ RE reliq: Bellard: p. 6.). Fili breves rigidi ramosissimi in parvum globulum saturate viridem complicati, articuli diametro quintuplo longiores.

10. *C. catenata* = L. syst: 973. = Spr: syst: IV. 359. n. 61. et 62. = Dill: musc: t. 5. f. 7. *C. prolifera* Roth: cat: I. p. 182. t. 3. f. 2. var: Sub *Ceramio* DC. fl: fr: n. 98. (In mari *Mediterr:* *Sardin:* in mari ad scopulos frequens MORIS st: sard: III.

p. 22.). Fili capillares flaccidi ramosi hyalini, articuli cylindrici elongati. Cl: NACCARI fl: ven: app: ad VI. p. 103. in not: observat, hanc stirpem valde variare colore, compositione, statura et articulorum longitudine. Hinc pluries confusam fuisse a Botanicis cum *C. rupestri* L. et perperam alias species de eadem fuisse constitutas.

\*? 11. *C. æruginosa* = L. syst: XII. p. 720. = Dill: musc: 23. t. 4. f. 20. (Plantis marinis litoris *Nicæens*: innascitur ALL: n. 2649.). Fili ramosi molles digito breviores viridissimi; char: ex L. Plantam non vidi. Omissa a SPR:

\*? 12. *C. fusca* = Huds: fl: angl: p. 486. = Sub *Sphacelaria* Lyngb: Sub *Ceramio* Dillw: Sub *Hutchinsia* Ag: sec: Steud: = Ic: ? (In litore *Nicæens*: ALL: n. 2657.). Fili geniculati ramosissimi ramis fasciculatis confertis viridibus; char: ex Huds: Plantam non vidi. Omissa a SPR:

\* 13. *C. rupestris* = L. sp: 1637. = Spr: syst: IV. 359. = Dill: musc: 28. t. 5. f. 29. Fl: dan: t. 948. Sub *Ceramio* DC. fl: fr: n. 100. (Ad saxa in maribus plerisque borealibus. Ad rupes litoris *Nicæens*: ALL: n. 2655.). Viridis cæspitosa, fili ramosissimi rigidiusculi articulis cylindricis diametro triplo longioribus; fructificatio ignota.

VII. ZYGNEMA Ag: sp: alg: XLVIII. = Spr: syst: n. 3422. = *Conservæ*, *Conjugatæ*, *Mongeotiæ* spec: nonnullæ quorund: (Inter *Conservoideas* Ag:).

» *Fila* tubulosa membranacea articulata. *Granulæ*  
» demum in globulos acervatæ. »



*Obs:* Fructificationis (parum conspicuæ) figura vix a *Conferva* distinguit hoc genus constans 6. stirpibus partim marinis partim in aquis dulcibus degentibus. Ex cl: Ag: in *Zygnema* fila conjuncta sunt ex tubis transversalibus granulis stellatis vel spiralibus, in *Mongeotia* fila sunt reticulata granulis inordinatim dispositis.

\* 1. *Z. genuflexum* = Spr: syst: IV. 360. = Sub *Mongeotia* Ag: syst: Sub *Conferva* Roth: cat: II. p. 199. = Dillw: brit: conf: t. 6. aliique. *C. serpentina* Mull: nov: act: Petrop: III. p. 92. t. 1. f. 9. *Conjugata angulata* et *serpentina* Vauch: conf: p. 79. 81. t. 8. f. 1. 9. pro *C. angulata* et f. 10. pro *serpentina* (In aquis dulcibus præsertim stagnantibus totius Eur:). Fili virides genuflexi seu plus minus revoluti, articuli diametro 2-3-longiores materia viridi semi-repleti.

\* 2. *Z. stellatum* = Spr: syst: IV. 360. = *Conferva gracilis, cruciata* et *pectinata* DC. fl: fr: n. 131. 135. 136. = Ex *Conjugatis* Vauch: conf: p. 73. t. 6. f. 2. p. 76. t. 7. f. 2. et p. 77. t. 7. f. 4. (Cum priori). Granula in stellulas varie disposita, articuli diameter plus minus excedentes, semina sphaerica inter loculos (*C. gracilis* et *cruciata*), vel in intervallo (*C. pectinata*) contenta ex VAUCH:

\* 3. *Z. quininum* = Ag: l. c. = Spr: syst: IV. 360. = Sub *Conferva* Mull: nov: act: Petrop: III. t. 2. f. 4. 5. *C. porticalis, condensata, inflata* et *elongata* DC. fl: fr: n. 126. 127. 128. 130. Ex *Conjugatis* Vauch: conf: p. 66. t. 5. f. 1. p. 67. t. 5. f. 2. p. 68. t. 5. f. 3. et p. 71. t. 6. f. 1. sec: Spr: (In

fossis et aquis lentis totius *Eur*:). Granula spiralia, spiræ simplices, articuli diametro triplo longiores, fructus elliptici. Spiræ formant tot V.

\* 4. *Z. decimum* = Ag: l. c. = Spr: syst: IV. 360. = Sub *Conferva* Mull: nov: act: Petrop: III. t. 2. f. 3. *C. jugalis* et *adnata* DC. fl: fr: n. 125. 129. Ex *Conjugatis* Vauch: conf: p. 64. t. 4. f. 1. 3. (*C. princeps*) et p. 70. t. 5. f. 4. (*C. adnata*) (In aquis lentis totius *Eur*:). Differt a priori spiris *cruciatis* laxis crucibus sæpius quaternis, articulis diametro *quadru-*  
*plo* longioribus. Spiræ formant tot X.

VIII. HYDRODICTYON Roth: cat: II. p. 238. = Spr: syst: n. 3423. = *Confervæ* spec: L. = *Dictyonemæ* spec: Ag:

» *Fila* tubulosa membranacea articulata reticulatim  
» juncta. *Articuli* vivipari, seu embryo revolutus in  
» quovis articulo nova individua progeniens. »

*Obs*: Genus constans ex Spr: 3. stirpibus, quarum  
1. tantum europæa.

\* 1. *H. pentagonum* = Vauch: conf: p. 88. t. 9. = Spr: syst: IV. 360. DC. fl: fr: n. 147. *H. majus*, *utriculatum*, et *tenellum* Roth: l. c. *Conferva reticulata* L. sp: 1635. = Dill: musc: t. 4. f. 14. (In aquis dulcibus *Eur*: *Pedem*: puris aquis lente fluentibus innata ALL: n. 2651. sub *C. reticulata*. Re fl: segus: p. 91. et fl: tor: II. p. 219. In aquis et rivulis pacatioribus collium BIROLI fl: acon: II. p. 206.). Reticula oblonga plus minus ampla ex viridi luteola, areolæ pentagonæ.

Obs: geographica circa *Confervinas*.

*Confervinæ* per orbem sparsæ circiter . . . 150

*Confervinæ* ligusticæ, nicæenses et pedemontanæ.

<i>Cladostephus</i>	4
<i>Ectocarpus</i>	3
<i>Polysiphonia</i>	3
<i>Griffithia</i>	1
<i>Ceramium</i>	1
<i>Conferva</i>	12
<i>Zygnema</i>	4
<i>Hydrodictyon</i>	1
	<hr/> 29

Et sic sextam partem constituunt.



## ORDO CCVII.

## S O L E N I A C E Æ

(*Soleniatæ* Spr: syst: IV. p. 313. = *Oscillariearum*  
 pars Bory = *Nostochinarum* et *Confervoidearum*  
 pars Bartl: ord: nat: p. 9. 10. = *Confervoidearum*  
 et *Ulvacearum* pars Ag: disp: alg:).

*Char: essentialis.*

» *Frons* tubulosa continua, *granulis* vario modo  
 » digestis. »

*Obs:* Ordo valde obscurus etsi exhibens plantas  
 seu substantias habitu et structura inter se se per-  
 affines, sed fructificatione vel non satis determinata  
 vel prorsus ignota, immo nonnullæ ex ipsis et præ-  
 sertim *Oscillatoria* aliaque artificialia genera proxima,  
 medium tenentia et eorum formam et simplicitatem  
 inter vegetabilia et animalia infima, ad quæ Botanici  
 quidam eadem amandare non dubitant ratione habita  
 præcipue ad quosdam motus tamquam spontaneos in  
 ipsis consideratos; ceterum substantiæ illæ valde fu-  
 gaces, sola ætate ita formam variantes ut diversas  
 omnimodo stirpes constituere crederes, perplures mi-  
 croscopicæ. Limites igitur inter ipsas determinare la-  
 bor fere impossibilis et vires meas prorsus excedens;  
 eo minus certam stationem ipsis præfinire licet. Sa-  
 tius igitur erit juxta propositum nostrum de solo  
*Herbario pedemontano*, nec de omnibus numeris ab-

solutam *Floram* præbendam, magis notas tantummodo enumerare, illasque præsertim quæ minora dubia et contestationes inter naturalis scientiæ cultores modo relinquunt, quod pariter extendendum ad sequentes *Algarum* ordines. Qui plura desiderat consulat citatum celeberrimi VAUCHERII opus ad calcem (Hist: des Tremelles p. 163.), nec non Auctores supra citatos in obs: ad *Algas*. Constat autem ordo iste ex SPR: generibus 12.

- I. OSCILLATORIA Vauch: trem: p. 190. = Ag: sp: alg: XLIX. = Spr: syst: n. 3426. = *Confervæ*, *Mucoris*, *Calothricis*, *Lynbyæ*, *Fuci*, *Ulvæ* stirp: nonnullæ quorund: (Inter *Confervoideas* Ag:).

» *Fila* tubulosa hyalina oscillatoria amento com-  
 » muni involuta, striis annulatis transversis paralellis  
 » notata. »

Obs: Genus constans ex SPR: 20. stirpibus terrestribus vel ex aquis dulcibus vel salsis præsertim borealibus, multis parasiticis, pluribus per partes discretas polyporum more multiplicantibus. Fila simplicia sunt vel ramosa varie disposita colore vario, striæ plus minus manifestæ plus minus approximatae, interdum inconspicuæ, quæ omnia bene inserviunt ad stirpes determinandas.

\* 1. *O. Flos aquæ* = Ag: l. c. = Spr: syst: IV. 362. Sub *Bysso* L. sp: 1637. = Sub *Conferva* Roth: (In aquis dulcibus. *Pedem*: super aquas in fossis verno tempore stagnantes ALL: n. 2658. sub *Bysso*. RE fl: segus: p. 91. et fl: tor: II. p. 218. excl: syn: SPR: BIROLI fl: acon: II. p. 207.). Fili simplices tenerrimi

plumosi natantes, striæ transversæ inconspicuæ. *Nostoc flos aquæ* LYNGB., cum quo confusa fuit planta nostra a cl: RE fl: tor: l. c., videtur diversum.

\* 2. *O. labyrinthiformis* = Ag: l. c. = Spr: syst: IV. 362. Sub *Ulva* L. syst: XII. p. 720. = *U. thermalis* Vandell: therm: 120. t. 2. (Ad thermas *Gallicæ*, *Italicæ*, *German: Pedem:* in thermis *Vinadii* et *Valderii* ad gradum caloris 50. ALL: n. 1639.). Fili tenuissimi in membranam latissimam sinuosam anfractuosam bullosam intricati. Præcipitatum inorganicum sec: POLLIN:

3. *O. distorta* = Spr: syst: IV. 362. ex Ag: syn: Sub *Conferva* fl: dan: t. 820. Sub *Calothrice* Ag: syst: *Trichophorus lanatus* Desv: (In aquis dulcibus stagnantibus. *Sardin:* in mari circa *Isola piana* ad scopulos MORIS st: sard: III. p. 26. sub *Trichophoro lanato*). Fili sub - ramosi rigidi glauci cæspitosi torti, striæ interruptæ. = 4. *O. muralis* = Spr: syst: IV. 363. ex Ag: syn: *O. parietina* Vauch: trem: p. 196. t. 15. f. 8. *Conferva muralis* et *frigida* Roth: *Lyngbia muralis* Ag: syst: (Ad muros, saxa etc. *Sardin:* in fossis humidis MORIS st: sard: III. p. 26.). Fili simplices virides flexuosi crassiusculi, striæ transversæ densæ, extremitates globosæ.

\* 5. *O. nigra* = Vauch: trem: p. 192. t. 15. f. 4. = Spr: syst: IV. 363. = *Conferva fontinalis* Engl: bot: t. 2054. (In fontibus rivulisque lentis aquæ innatans. *Pedem:* in terra limosa retro *Venariæ* sepulcretum RE app: III. p. 19.). Fili simplices annulati nigri, annuli latitudo longitudinem triplo excedens, extremitates vix difformes.



II. STIGONEMA Spr: syst: n. 3428. = *Lichenis*, *Corniculariæ*, *Conservæ*, *Scytonemæ*, et *Bangiæ* spec: quorund:

» *Fila* tubulosa coriacea intus punctis annulatis  
» notata. »

*Obs:* Genus constans ex Spr: 2. stirpibus pro genere obscuris.

\* 1. *St: atrovirens* = Spr: syst: IV. 364. = *Cornicularia pubescens* Ach: meth: lich: p. 305. et lichen: univ: p. 616. *Lichen pubescens* L. alii que. = *L. lanatus* Wulf: in Jacq: misc: II. t. 10. f. 5. (Ad rupes subalpinas Eur: præsertim bor: *Pedem*: supra saxa in parvo *M. Cenisio* BELLARD: app: p. 70. Re fl: segus: p. 90.). Planta ludens inter *Algas* et *Lichenes*, cæspitosa filis ramosis rigidis olivaceo-fuscis granulis 2-3-serialibus.

III. VAUCHERIA DC. fl: fr: II. p. 61. = Spr: syst: n. 3429. = *Conservæ*, *Ceramii*, *Ectospermæ*, *Ricciæ*, *Byssi* spec: nonnullæ quorund: (Inter *Ulvaceas* Ag:).

» *Fila* tubulosa ramosa pulvere granuloso viridi  
» intus aspersa. *Vesicula* externa globosa tandem ca-  
» duca (*semina* DC.). »

*Obs:* Genus præsentia vesicularum exteriorum satis ab affinis distinctum; hæ vel *solitariæ* sunt vel *binæ* aut *aggregatæ*, filii autem plus minus *tenues* varie *ramosi*, quæ maximi habentur ad distinguendas stirpes fere omnes in aquis dulcibus vel terra umbrosa enascentes.

\*? 1. *V. terrestris* = DC. fl: fr: n. 152. = Spr:

syst: IV. 364. ? (In terra humida umbrosa. *Sardin*: in umbrosis humidis MORIS st: sard: III. p. 26.). Planta mihi dubia; an eadem ac *Conferva velutina* DILLW: sc: *Byssus velutina* L. monentibus VAUCH: et DC. ? Cl: MORIS de syn: L. silet. An melius *V. terrestris* MORIS ad *Confervam amphibiam* L. syst: XII. p. 720: referenda ? Mihi potius videtur ex comparatione speciminum utriusque stirpis; hanc communem habemus in fossis locisque inundatis (ALL: n. 2647. RE fl: segus: p. 91. et fl: tor: II. p. 219. BIROLI fl: acon: II. p. 206. omnes sub *Conferva amphibia* DILL: musc: 22. t. 4. f. 17.), et pertinet ad *V. Dillwynnii* Ag: statimque distinguitur a *Conferva velutina* nostra expansione valde *majori*, ac præsertim filis exsiccatione *in aculeos coeuntibus* nec stratum *velutinum* formantibus.

\* 2. *V. clavata* = DC. fl: fr: n. 157. = Spr: syst: IV. 364. = Sub *Ectosperma* Vauch: conf: p. 34. t. 3. f. 10. *Conferva bullosa* L. syst: XII. p. 720. Dill: musc: 18. t. 3. f. 11. ? (In fossis sub-marinis et rivulis. *Pedem*: frequens in aquis stagnantibus ALL: n. 2643. sub *Conferva bullosa*. RE fl: segus: p. 91. et fl: tor: II. p. 219. excl: syn: BIROLI fl: acon: II. p. 206.). Fili capillares sub-ramosi apice vesicula elevata terminati. Planta mihi pariter dubia pro synon: *Conferva fracta* VAHL: quam hic tradit cl: RE videtur pertinere ad *C. bullosam* WEIS: non L.

\* 3. *V. cæspitosa* = DC. fl: fr: n. 155. = Spr: syst: III. 365. = Sub *Ectosperma* Vauch: conf: p. 28. t. 2. f. 4. *Conferva canalicularis* L. syst: XII. p. 720. Dill: musc: 21. t. 4. f. 15. (In terra irrigua ad fon-

tes. *Pedem*: in aquæductibus et rivulis ALL: n. 2646. In aquæductibus secus *Padum* ad *S. Nazzaro di Borgondi* BIROLI fl: acon: II. p. 206. *Sardin*: in locis limosis MORIS st: sard: III. p. 26.). Fili capillares breves cæspitem saturate viridem formantes ramis ultimis horizontalibus secundis, vesiculæ binæ terminales sessiles ovoideæ mucrone recto intermedio.

IV. BRYOPSIS Ag: sp: alg: p. XXXIV. = Spr: syst: n. 3430. ex Lamourx: = *Ulvæ*, *Fuci*, *Confervæ* spec: nonnullæ quorund: (Inter *Confervoideas Ulvoideas* Ag:).

» *Frons* tubulosa pinnata nitida, humore viridi incluso colorata. »

*Obs*: Genus constans ex SPR: 5. stirpibus marinis fructificatione inconspicua.

\* 1. *Br*: *Arbuscula* = Spr: syst: IV. 365. ex Lamourx: = Sub *Fuco* DC. fl: fr: n. 82. *Bryopsis balbisiana* et *cupressina* Lamourx: *Conferva tenax* Roth: *Ulva plumosa* Huds: angl: 571. = Engl: bot: t. 2375. (Ad oras *Galliæ*, *Ital*., *German*: bor: et *Angliæ*. In mari *Nicæens*: BALB: el: p. 4. sub *Br*: *balbisiana*. *Sardin*: ad scopulos marinos vel ad litus rejecta ab undis MORIS st: sard: III. p. 24. sub *Conferva tenaci*). *Frons* compressiuscula superne decomposito - ramosa ramis pectinatis. In specim: meis materia viridis inclusa videtur interrupta, ita ut frons ramique hinc inde diaphani adpareant. Stirps pro synon: obscura. Cl: DC. cum *Fuco Arbusculæ Ulvam plumosam* commutavit, quod iterum fecit SPR:; hæc cum *Conferva tenaci* sec: AG: ad *Br*: *plumosam*, ille ad *arbusculam* pertinet.



V. CODIUM Spr: syst: n. 3431. ex Stackh: = *Fuci*, *Ulvæ*, *Flabellariae*, *Alcyonii*, *Lamarckiae*, *Myssidii*, *Corallinae*, et *Halymeniae* spec: nonnullæ quorund: (Inter *Nostochino-Ulvoideas* Ag:).

» *Frons* spongiosa ex filis densissime aggregatis tubulosis continuis pulvere granuloso coloratis. *Vesiculae* globosæ terminales. »

*Obs*: Genus constans 4-5. stirpibus marinis, praesertim ex *Mediterr*:

\* 1. *C. membranaceum* = Spr: syst: IV. 366. = *C. membranaceum* et *flabelliforme* Ag: = *Ulva flabelliformis* Wulf: Roth: cat: III. p. 323. t. 11. fig: A aliique. *Fucus Flabellum* Bertol: am: ital: p. 311. *Flabellaria Desfontainii* Lamourx: an: du mus: tom. XX. p. 274. t. 12. f. 4. (In mari *Mediterr*: In radis profundioribus portus *Lunæ*, super saxa et conchas majores a *Pegli* in scopulis, inter *Clavarum* et *Zoagli* BERTOL: l. c. p. 312. *Sardin*: in mari *S. Elia* in cavis scopulorum MORIS st: sard: III. p. 24. Habeo a BEL-LARD: lectum in mari *Nicæens*: prope *Villafranca* sub falso nomine *Fuci palmati* L. Enumeratur a BALB: in cat: alphab: apud BUNIVA réfl: sur les œuvr: d'Allioni etc. p. 43. sub *Ulva flabelliformi*). *Frons* membranacea atro-virens plana flabelliformis superius lacera vel integra laxa fibrosa, fibræ zonis armatis plus minus conspicuis intersectæ.

\* 2. *C. tomentosum* = Spr: syst: IV. 365. ex Ag: = Sub *Fuco* Huds: fl: angl: 584. = Stack: ner: bat: p. 21. t. 7. Moris: hist: III. p. 647. s. 15. t. 8. f. 7. Sub *Ulva* DC. fl: fr: n. 12. (In mari *Atlant*., *Me*-

*diterr.*, *Pacifico*. Ex *Mediterr.*: ad litus rejectum DC. l. c. In mari *Nicæens*: BALB. el: p. 8.). Frons teres firma viridiuscula fungosa erecta ramosa ramis fastigiatis bifurcis obtusis.

VI. VALONIA Ag: sp: alg: XXXI. = Spr: syst: n. 3432. = *Gastridii* et *Conservæ* spec: nonnullæ quorund: (Inter *Ulvaceas genuinas* Ag:).

» Frons saccata vel cylindrica, simpliciuscula vel  
» verticillatim ramosa, membrana hyalina nec fibrosa  
» composita intus pulvere viridi adpersa. *Vesiculæ*  
» globosæ aggregatæ sparsæ. »

*Obs*: Genus constans 4. stirpibus marinis præsertim ex *Mediterr.*:

1. *V. utricularis* = Ag: l. c. Spr: syst: IV. 366. Sub *Conserva* Roth: cat: l. p. 160. t. 1. f. 1. (In mari *Adriat.*: NACCAR: fl: ven: VI. p. 70. n. 1207.). Frons saccato-inflata cylindrico-clavata vix ramosa.  
= 2. *V. ægagropila* = Ag: l. c. Spr: syst: IV. 366. Sub *Conserva utriculari* Bertol: am: ital: p. 228. n. 90. non Roth: (In mari *Mediterr.*: præsertim in lacuna *Veneta* BERTOL: l. c. NACCAR: fl: ven: VI. p. 70. n. 1236.). Vix differt a priori fronde cæspitulosa, ramis evidentioribus verticillatis sub-clavatis.

VII. CAULERPA Lamourx: ann: du mus: tom. XX. p. 282. = Ag: sp: alg: XXXIII. = Spr: syst: n. 3434. = *Fuci* et *Ulvæ* spec: nonnullæ quorund: (Inter *Ulvaceas genuinas* Ag:).

» Frons stipitata membranacea pinnata, vel ramen-  
» tis brevissimis imbricatis e surculo repente cartila-  
» gineo proveniëns. »

*Obs:* Genus pro fructificatione prorsus obscurum, constans ex SPR: stirpibus 13. fere omnibus a *Fuco* diremptis, per maria præsertim tropicalia sparsis, una tantum ex *Mediterr*:

\* 1. *C. prolifera* = Ag: l. c. = Spr: syst: IV. 366. Sub *Fuco* Forsk: ægypt: p. 193. n. 60. = *F. Ophio-glossum* Turn: hist: fuc: I. p. 128. t. 58. *Ulva nitida* Bertol: am: ital: p. 94. (In mari *Atlant*: et *Mediterr*: In *Lunæ* portu et copiose hyeme in litore di *S. Terenzo* vel a mari ejecta vel a piscatoribus per retia avulsa BERTOL: l. c. *Sardin*: in fundo maris *S. Elia*, ins: *S. Pietro* ad *Zosteram* aliaque MORIS st: sard: III. p. 26. sub *Ulva nitida*). Cauliculus seu stipes tere-tiusculus valde repens radicans hinc inde frondosus, frondes saturate virides petiolatæ erectæ planæ ob-longæ utrinque rotundatæ passim proliferæ sc: 1 - 3. frondes secundarias minores gerentes.

VIII. SOLENIA Spr: syst: n. 3435. ex Ag: non Hoffm: nec Pers: = *Ulvæ*, *Gastridii*, *Tetrasporæ*, *Rivulariæ*, *Conservæ*, *Scytosiphonis*, *Dumontiæ*, *Fuci*, *Haly-menicæ*, *Chordariæ*, *Enteromorphæ* spec: nonnullæ quorund: (Inter *Ulvaceas* Ag:).

» *Frons* tubulosa membranacea areolata. *Granula* minutissima in areolis membranæ digesta. »

*Obs:* Genus a *Soleniaceis* ad *Ulvaceas* transitum faciens, ac constans ex SPR: stirpibus 9. ab *Ulva* præsertim diremptis, quarum 3-4. in aquis dulcibus, ceteræ in salsis degentes.

\* 1. *S. intestinalis* = Spr: syst: IV. 367. ex Ag: = Sub *Ulva* L. sp: 1632. alique = Dill: musc: t. 9.



f. 7. Sub *Conserva* Roth: cat: I. p. 159. Sub *Ente-romorpha* Link: ( In fluviiis et stagnis *Eur*: In mari *Nicææ* et *Uneliæ* ALL: n. 2636. sub *Ulva*. In valle *Ticini* ad *Campumlatum* in stagnis versus locum dictum *la Magajola* unice collegit BIROLI fl: acon: II. p. 205. *Sardin*: in aquis salsis stagnantibus frequens MORIS st: sard: III. p. 26. omnes sub *Ulva* ). Frons simplicissima linearis elongata pallide virens sinuoso-anfractuosa.

\* 2. *S. Bertoloni* = Spr: syst: IV. 367. ex Ag: = *Ulva crispata* Bertol: am: ital: p. 93. t. 223. n. 52. = Michel: tab: ined: 5. Op: post: I. p. 24. t. 24. f. 55. sec: Bertol: ( In mari *Mediterr*: In aquis maritimis prope *Albengam* RE app: III. p. 19. Obvia in *Lunæ* portu adhærens rupibus fere ad maris pacati libellum vel in Fucis majoribus, etiam ad litora ejecta reperitur BERTOL: I. c. p. 93. *Sardin*: in aquis salsis ad rupes aliaque MORIS st: sard: III. p. 26. ). Frons cæspitosa sub - ramosa pallide virens basi attenuato - tubulosa subinde amplior valde elongata plana interdum bullosa margine undulato-crispata apice in acumen prorsus planum integerrimum producta.

\* 3. *S. compressa* = Spr: syst: IV. 367. ex Ag: = Sub *Ulva* L. sp: 1632. = Dill: musc: t. 9. f. 8. A B C D. Engl: bot: t. 1739. *Conserva compressa*, *crinita*, et *flexuosa* Roth: varr: *C. fistulosa* Wulf: ( In aquis salsis et dulcibus. In mari *Nicææ* et *Uneliæ* ALL: n. 2637. *Sardin*: ad rupes saxaque in mari stagnisque salsis MORIS st: sard: III. p. 26. omnes sub *Ulva* ). Frons tenuissima compresso-teretiuscula ramossissima ramis capillaribus simpliciusculis; variat ramis



## ORDO CCVIII.

## U L V A C E Æ

(Spr: syst: IV. p. 314. = *Ulvacearum genuinarum*  
 pars Ag: = *Confervacearum* pars Bartl:  
 ord: nat: p. 10.).

*Char: essentialis.*

» *Frons* membranacea granulis minutissimis con-  
 » spersa. »

*Obs:* Ordo a *Soleniaceis* vix distinctus fronde plana  
 nec tubulosa, constans ex SPR: 2. tantum generibus.

I. ULVA Lin: syst: ed: Murr: n. 1206. excl: nonnullis  
 stirpib: = Spr: syst: n. 3436. = Lam: ill: t. 880.  
 = *Bangiæ*, *Tremellæ*, *Xytosiphonis*, *Soleniæ*, *En-*  
*coëlii*, et *Porphyræ* spec: nonnullæ quorund:

» *Frons* plana membranacea viridis vel purpurea.  
 » *Granula* in membrana digesta vel sparsa. »

*Obs:* Genus nunc constans ex SPR: 13. stirpibus,  
 quarum 3-4. in aquis dulcibus crescentibus, ceteris  
 marinis. Circa *Ulvarum* structuram et naturam cons:  
 præsertim VAUCH: hist: des Ulv: in opere supra cit:  
 p. 229. et seq:

\* 1. *U. crista* = Lightf: scot: 2. non DC. = Spr:  
 syst: IV. 368. = Dill: musc: t. 10. f. 12. *U. terre-*  
*stris* Roth: cat: I. p. 211. DC. fl: fr: suppl: p. 3. n.



17.<sup>a</sup> *U. Lactuca* γ Huds: (In umbrosis Eur: Circa Nicæam BALE: add: p. 101. sub *Conferva tremelloidea*). Frondes confertæ bullosæ decumbentes in membranam virescentem plicato-crispam expansæ. *U. crispata* DC. pertinet ad *Chondrum crispum* LYNGB: (*Sphaerococcus* SPR:), et crescit in Oceano.

\* 2. *U. Linza* = L. syst: XII. p. 720. = Spr: syst: IV. 368. = Dill: musc: 46. t. 9. f. 6. Fl: dan: t. 889. (In aqua salsa et maritima. In mari Adriat: NACCAR: fl: ven: VI. p. 72. In mari Nicææ et Uneliæ ALL: n. 2640.). Frons simplex oblongo-lanceolata viridis integra longitudinaliter plicato-flexuosa.

\* 3. *U. Lactuca* = L. sp: 1632. = Spr: syst: IV. 368. = Dill: musc: t. 8. f. 1. Engl: bot: t. 1551. (In maribus plerisque Eur: In mari Nicææ et Uneliæ ALL: n. 2638. Sardin: in aquis maritimis ad saxa aliave MORIS st: sard: III. p. 26.). Frons viridis plus minus expansa plus minus elongata simplex vel aggregata constanter tamen undulato-crispa *Lactucam sativam* var: *crispam* æmulans. Huc pertinet *U. latissima* L., quæ differt tantum fronde *simplicissima ampliori* (magnitudine folii *Musæ* L.), et *U. lanceolata* ejusdem Auctoris, in qua frondes sunt *angustiores* utrinque *attenuatæ*; hæc habetur a quibusdam pro var: *U. Linzæ* (*Solenia Linza* β *lanceolata* Ag:), vel pro stirpe distincta (*Ulva lanceolata* Auctor:).

\* 4. *U. umbilicalis* = L. sp: 1633. = Spr: syst: IV. 369. = Dill: musc: t. 8. f. 3. Engl: bot: t. 2286. *U. purpurea* Roth: cat: I. p. 209. t. 6. f. 1. var: *U. sericea* Wulf: sec: Steud: *Porphyra purpurea* Ag: (In

in mari *Septentr.*, *Oceano*, *Mediterr.* Ad rupes maris *Nicæens*: ALL: n. 2635. *Sardin*: in mari *Porto-scuso* et inter portum *Caralis* ad parietes MORIS st: sard: III. p. 26. sub *U. sericea*). Frons sub-rotunda longitudinaliter plicata sessilis umbilicata sinuoso-lobata, brunea centro affixa (*U. umbilicalis*), vel purpure-scenti latere affixa (*U. purpurea*).

Obs: geographica circa *Ulvaceas*.

<i>Ulvaceæ</i> per orbem sparsæ circiter . . .	14
<i>Ulvaceæ</i> pedemontanæ et nicæenses . . .	4

Et sic fere tertiam partem constituunt.

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## ORDO CCIX.

## TREMELLOIDEÆ

(Spr: syst: IV. p. 314. = *Confervoidearum*  
et *Tremellinarum* pars Ag: = *Nostochinæ* Bartl:  
ord: nat: p. 9.).

*Char: essentialis.*

» *Frons* gelatinosa simplex vel ramosa solida vel  
» membranacea continua vel articulata. »

*Obs:* Gelatina frondes plantarum hujusce ordinis  
obducens illum præsertim distinguit a præcedentibus.  
Constat autem ex SPR: generibus 9. nimis forsan ar-  
tificialiter distinctis; vegetabilia inter *Algas* infima  
et valde ad animalia accedentia; fructificatio prorsus  
ignota.

I. BATRACHOSPERMUM Vauch: conf: p. 105. ex Roth: =  
*Draparnaldice* et *Batrachospermi* spec: Spr: syst: n.  
3438. 3489. = *Conservæ*, *Charæ*, *Lemanæ*, *Tho-*  
*rinæ*, et *Monilinæ* spec: nonnullæ quorund: (Inter  
*Confervoideas* Ag: spec: alg: LIV.).

» *Frons* ramosa sub-orbiculata, ramis zonatis pe-  
» nicillatis (in *Draparnaldia*), vel moniliiformibus,  
» globis gemmaceis externis (in *Batrachospermo*). »

*Obs:* Genus constans 5 - 6. stirpibus inclusa *Dra-*  
*parnalia* BORY non satis pro genere distincta; plantulæ  
in locis turfosis et aquis dulcibus degentes.



\* 1. *B. glomeratum* = Vauch: l. c. p. 114. t. 12. f. 1. = *Conferva mutabilis* Engl: bot: t. 1740. = *Draparnaldia glomerata* Spr: syst: IV. 369. (In rivulis et fluviis Eur: fere totius). Ramosissimum viride ramulis articulatis brevibus fasciculatis multifidis penicilliformibus.

\* 2. *B. moniliforme* = Vauch: l. c. p. 112. t. 11. f. 1. = Spr: syst: IV. 269. *Conferva gelatinosa* L. syst: 973. = Dill: musc: t. 7. f. 42. 46. *Chara gelatinosa* et *batrachosperma* Roth: Weis: (In rivulis et aquis dulcibus. In puris rivulis fontium ALL: n. 2652. sub *Conferva gelatinosa*. Lapidibus inhæret in puris rivulis e fontibus manantibus RE fl: segus: p. 91. In rivulis fontium præsertim *alla Molinetta* RE fl: tor: II. p. 219. Ad rivulos collium in umbrosis super saxa BIROLI fl: acon: II. p. 206. In rivulis *Sardin: centralis* MORIS st: sard: III. p. 22.). Frons moniliformis ramosissima colore vario ramis alternis patentibus ramulis verticillatis.

II. MESOGLOEA Ag: sp: alg: LVI. = Spr: syst: n. 3441. = *Ulvæ*, *Chetophoræ*, *Chordariæ*, *Rivulariæ*, *Alegonidii*, et *Fuci* spec: nonnullæ quorund: (Inter *Tremellinas* Ag:).

» Frons ramosa gelatinosa articulata, ramis pariter articulatis, capsulis terminalibus. »

Obs: Genus constans ex SPR: 4. stirpibus ex mari-bus præsertim septentrionalibus.

\* 1. *M. vermicularis* = Ag: l. c. = Spr: syst: IV. 370. Sub *Alegonidio* Lamourx: *Fucus tremelloides* Bertol: am: ital: p. 316. = Michel: tab: ined: 61. f. 1. 2.

sec: Bertol: (In mari *Atlant:* et *Septentr:* In *Luncæ* portu prope arcem *S. Theresiæ* loco dicto *Pertusolo* in scopulis demersis, ex mari *Clavarum* BERTOL: l. c.). Frons pulposo-gelatinosa flavida ramis gyroso-plicatis, maculæ capsuliferæ parvæ sub-circulares sparsæ.

III. CHÆTOPHORA Ag: spec: alg: n. LVII. = Spr: syst: n. 3442. = *Tremellæ*, *Rivulariæ*, *Nostoc*, *Corynephoræ*, *Batrachospermi*, *Ulvæ*, et *Ricciæ* spec: nonnullæ quorund: (Inter *Tremellinas* Ag:).

» *Massa* gelatinosa filis ramosis articulatis farcta. »  
*Obs:* Genus constans 7. stirpibus præcipue ex stagnis et aquis dulcibus.

\* 1. *Ch: elegans* = Ag: l. c. = Spr: syst: IV. 370. Sub *Rivularia* Roth: = *Batrachospermum intricatum* Vauch: conf: p. 117. t. 12. f. 2. 3. (In lacubus et stagnis ad plantas aquaticas et alia corpora. Habeo ex PERRET lectam *sur les murs du bassin des eaux thermales d'alun d'Aix*). *Massa* gelatinosa læte viridis valde varians magnitudine farcta filis tenuissimis ramosissimis articulatis articulis diametro duplo longioribus, ramulis apice longe ciliatis.

IV. NOSTOC Vauch: conf: p. 203. t. 16. = Spr: syst: n. 3444. = *Tremellæ*, *Ulvæ*, *Conservæ*, *Linckia*, *Rivulariæ* spec: nonnullæ quorund: (Inter *Tremellinas* Ag: sp: alg: LX.).

» *Frons* membranaceo-gelatinosa, filis moniliformibus curvatis farcta. »

*Obs:* Genus constans ex SPR: 8. stirpibus in terra humida aquisque dulcibus degentibus, ex articulis

sponte secedentibus se se multiplicantibus; frondis figura, ejus color, et gelatinæ substantia soli characteres specifici, fili enim vix oculis nudis conspici et valde uniformes.

\* 1. *N. commune* = Vauch: l. c. p. 223. t. 16. f. 1. = Spr: syst: IV. 372. *Tremella Nostoc* L. sp: 1625. aliique. *Linckia Nostoc* Roth: = Dill: musc: t. 10. f. 14. (Ad terram humidam umbrosam ubique vulgare. *Pedem*: in pascuis et ambulacris humidis post pluviam adparet ALL: n. 1599. sub *Tremella Nostoc*. In pascuis arenosis RE fl: segus: p. 91. *Sardin*: in terra humente MORIS st: sard: III. p. 25.). Frons initio globulosa cito difformis irregulariter plicata undulata ex viridi nigrescens, filorum articulus extremus major sec: VAUCH: Huc referenda sec: STEUD: *Tremella atrovirens* BULL: a ell: BALB: fl: taur: p. 203. et RE fl: tor: II. p. 324. enumerata.

\* 2. *N. pruniforme* = Spr: syst: IV. 372. ex Ag: = Sub *Ulva* L. Sub *Tremella* et *Linckia* Roth: = Weig: obs: p. 40. t. 2. f. 4. *Ulva papyracea* Balb: ex Schleich: (In lacubus et paludibus. *Pedem*: in agro *Morettensi* locis paludosis *del Fornas* dictis BALB: misc: alt: p. 38.). Frons sub-globosa gelatinoso-solida ex viridi lutescens demum nigrescens exsiccatione cyanea, fili rari elongati valde arcuati articulis sub lente a medio ad apicem valde majoribus.

\* 3. *N. sphaericum* = Vauch: conf: p. 223. t. 16. f. 2. = *Ulva granulata* L. sp: 1632. = Dill: musc: t. 10. f. 17. *Conserva Pisum* fl: dan: t. 660. f. 2. ? (In aquis dulcibus et in terra humida. *Pedem*: prope *Casin Barolo* ac hyeme etiam in arvis prope *la Mo-*



*linetta* RE fl: tor: II. p. 218. BALB: cl: p. 8. sub *Ulva granulata*). Vix differt a *N. communi* n. 1. fronde constanter *sphærica* sæpius aggregata numquam plicata. Huc pertinet *Tremella granulosa* BULL: a BALB: enumerata in misc: bot: p. 56.

\* 4. *N. verrucosum* = Vauch: conf: p. 225. t. 16. f. 3. = Spr: syst: IV. 372. Sub *Tremella* L. sp: 1625. = Dill: musc: t. 10. f. 16. Sub *Linckia* Roth: (In rivulis ad saxa. *Pedem*: in valle di Lanzo ad rivulos lente decedentes super lapides ALL: n. 1601. sub *Tremella*. Super saxa in aquis del Sangone et alibi in saxosis torrentibus ubi aqua semper est perennis RE fl: segus: p. 91. *Sardin*: ad saxa rivulorum MORIS st: sard: III. p. 26.). Frons sub-globosa atro-virens tuberculis seu verrucis conspersa, filii annulati vix moniliformes sec: VAUCH:

\*? 5. *N. flos aquæ* = Spr: syst: IV. 372. ex Lyngb: (In lacubus et stagnis libere natans). Enumeratur a cl: RE fl: tor: II. p. 218. cum phrasi SPR: l. c. addito synon: *Byssi flos aquæ* L., sed planta L. pertinet ad *Oscillatoriam flos aquæ* AG: de qua supra, quæque ex descr: Auctorum videtur diversa, etsi a cl: STEUD: p. 297. cum eadem confusa. *N. flos aquæ* LYNGB: exhibet substantiam *spumeam* nec *filis plumosis* farctam.

V. COCCOCHLORIS Spr: syst: n. 3445. = *Ulvæ*, *Tremellæ*, *Vaucheriæ*, *Botrydii*, *Byssi*, *Palmellæ*, *Uredinis*, *Leprariæ*, *Protococci*, *Lichenis*, *Sclerotii*, *Batrachospermi*, *Hydruri* spec: nonnullæ quorund:

» *Massa gelatinosa* granulis globulosis farcta. »

*Obs:* Genus a SPR: creatum ac medium tenens (si bene determinatum) inter veras *Tremellas* ad *Fungos* pertinentes, et *Tremellas Nostochinas*, de quibus hic agimus: veræ *Tremellæ* sunt substantiæ gelatinosæ *sporidiis* (*granula*, *semina*) superficie sparsis; *Tremellæ Nostochinæ* exhibent generatim *filos* in substantia gelatinosa; genus Sprengelianum granula refert uti veræ *Tremellæ*, sed in substantia ipsa nec extus sparsa; ceterum stirpes 9 - 10. quibus componitur, valde obscuræ præsertim pro synonymia.

\* 1. *C. radicata* = SPR: syst: IV. 372. excl: syn: *Ulvæ* L. = Sub *Faucheria* AG: *Byssus botryoides* L. = FL: dan: t. 899. f. 3.? *Palmella botryoides* AG: syst:? (In inundatis argillaceis. *Pedem*: post ingentes pluvias locis arenosis occurrit ubi læte virenti tapete humum humidiusculum quasi sub-continuo tegit BALB: misc: bot: p. 56. sub *Tremella granulosa*. In muris et terra humida frequens varians colore viridi flavescente et olivaceo BIROLI fl: acon: II. p. 169. sub *Lepraria botryoidea*? Ad arborum truncos valde frequens RE fl: tor: II. p. 255. sub *Byssu botryoideo*). Confunditur a quibusdam cum *Nostoc sphærico* n. 3. fronde sub-globosa aggregata, sed præter characteres genericos differt singula fronde statura generatim minore, frondium aggregatione constantiori, colore viridi.

\* 2. *C. rosea* = SPR: syst: IV. 373. = Sub *Tubercularia* Pers: = Sub *Lichene* Schreb: (Ad cortices arborum. Supra *Lichenes* et speciatim supra *Borreram tenellam*, *Lecideam parasemam*, et *Lecanoram candellianam* invenit RE app: II. p. 219. sub *Tuber-*

*cularia*. In cortice arborum legit PERRET prope *Aix* in *Sabaud*:). Frons sub-hemisphærica aggregata læte rosea tuberculata tuberculis sparsis rotundatis sublobatis difformibus; facies *Lichenis*.

\* 3. *C. Myosurus* = Spr: syst: IV. 373. = Sub *Batrachospermo* Ducluz: Ess: conf: p. 76. *B. Myosurus* DC. fl: fr: tom. II. p. 591. n. 146. \* = *Ulva intestinalis* Chantr: conf: p. 16. t. 1. f. 2. non L. sec: DC. fl: fr: suppl: p. 645. (In rivulis rupestribus. Habeo ex rivulis *Mouxy* prope *Aix* in *Sabaud*: a PERRET). Differt ab omnibus hujusce generis stirpibus fronde valde elongata cylindrica viridi ramosa, sc: ramulis capillaribus brevibus seu pilis undique instructa, ex qua forma Galli *Queue de chat* illam appellant; granula globosa quæ memorat SPR: non vidi, nec de ipsis mentionem facit cl: DC. ll. cc.

Obs: geographica circa *Tremelloideas*.

*Tremelloideæ* per orbem sparsæ circiter . . . 48

*Tremelloideæ* pedemontanæ.

<i>Batrachospermum</i>	2
<i>Mesogloëa</i>	1
<i>Chætophora</i>	1
<i>Nostoc</i>	5
<i>Cocchochloris</i>	3

12

Et sic quartam partem constituunt.



## ORDO CCX.

## A M P H I B O L Æ

(Spr: syst: IV. p. 314. = *Confervoidearum*  
pars Ag: spec: alg: et Bartl: ord: nat: p. 10.  
= *Diatomearum* pars Fries).

*Char: essentialis.*

» *Frons plana articulata, articulis solutis.* »

*Obs:* Ordo constans ex SPR: 3. tantum generibus,  
quorum stirpes (11. omnibus generibus inclusis) valde  
obscuræ, in lacubus et fossis vel ad plantas aquaticas aut  
in æstuariis nascentes. De illis unicam possideo speciem.

I. DIATOMA DC. fl: fr: n. II. p. 48. = Ag: spec: alg:  
XLI. = Spr: syst: n. 3449. = *Conservæ* et *Echi-*  
*nellæ* spec: quorund:

» *Fila simplicissima diaphana articulata in frustula*  
» *demum, uno ex angulis excepto, transversim sece-*  
» *dentia.* »

*Obs:* Plantæ pseudo-parasiticæ oculo nudo vix con-  
spiciuæ; species ex SPR: 5. omnes aquaticæ.

1. *D. crystallinum* = Naccar: fl: ven: VI. p. 38.  
*Echinella fasciculata* Lyngb: t. 70. sec: Naccar: (In  
lacunis *Venetis* super *Utchinsias* et *Conservas* NACCAR:  
l. c.). Specim; meum ex cl: NACCAR: exhibet fila te-  
nuissima vix oculis nudis conspicua crystallina luteola  
in flabellulum disposita ad ramos *Utchinsicæ violacæ*.

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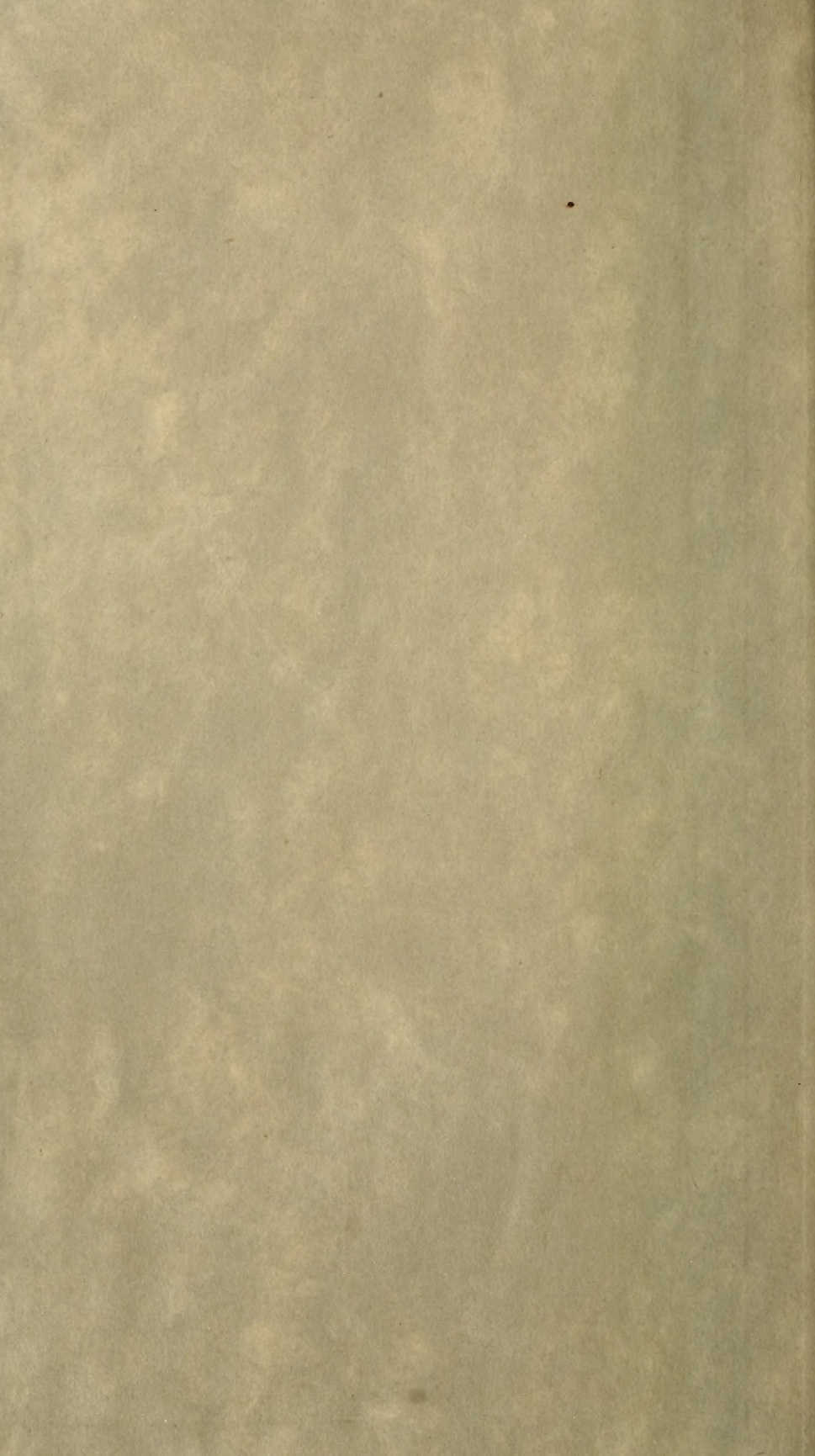


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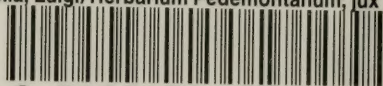


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